

FIG. 1

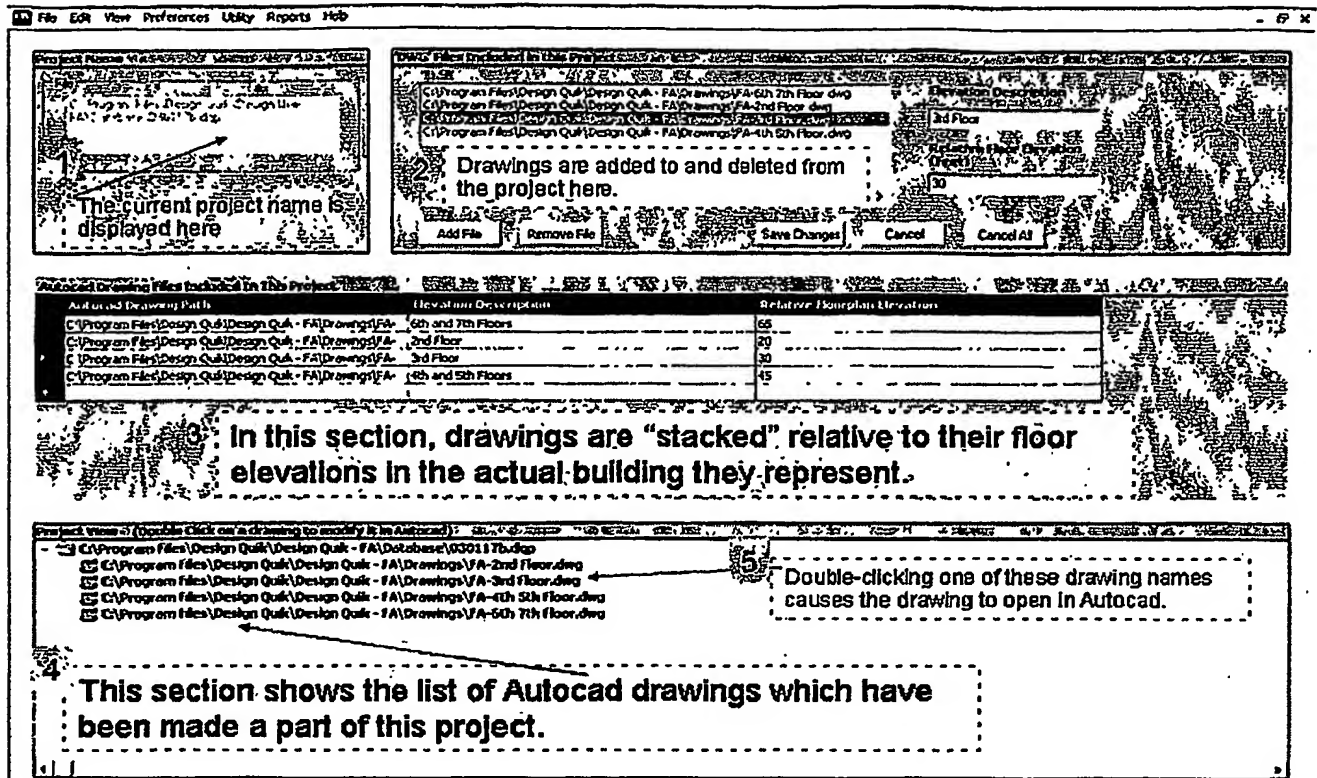


FIG. 2

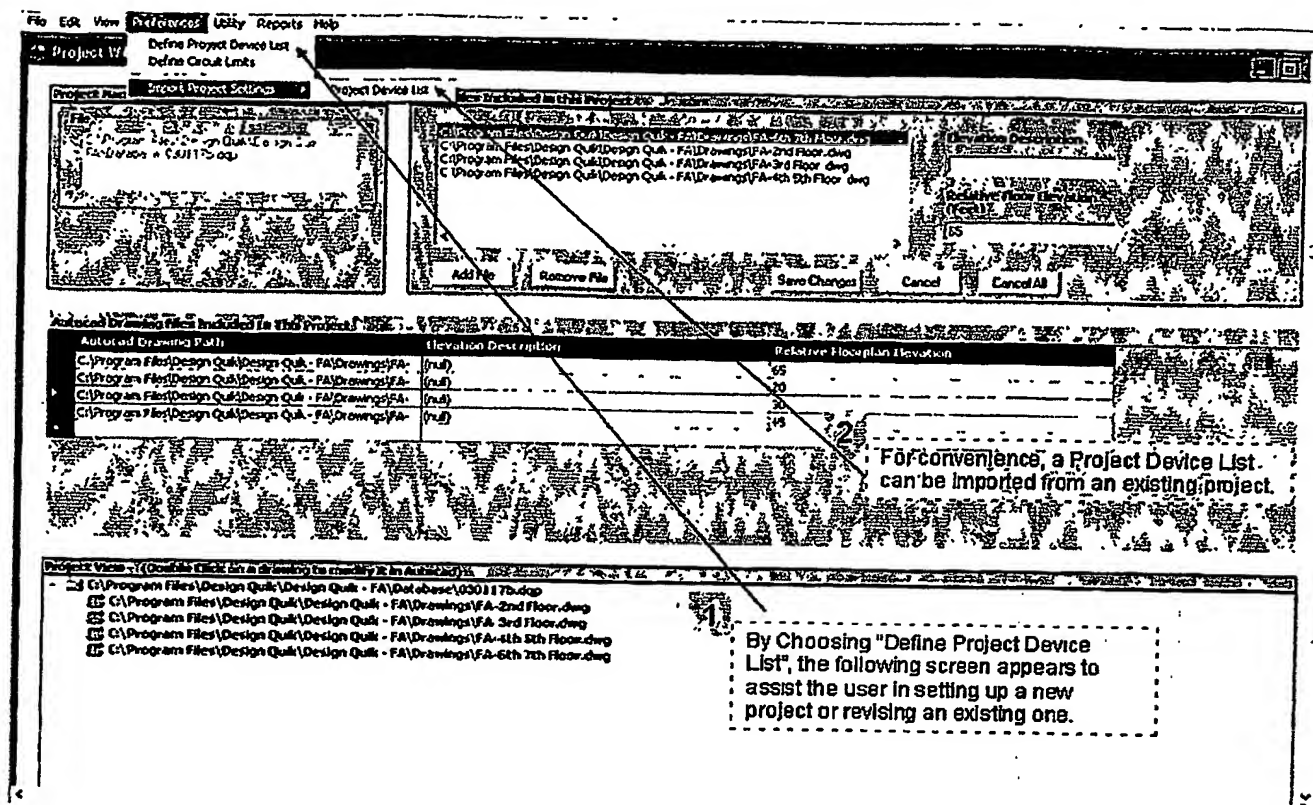
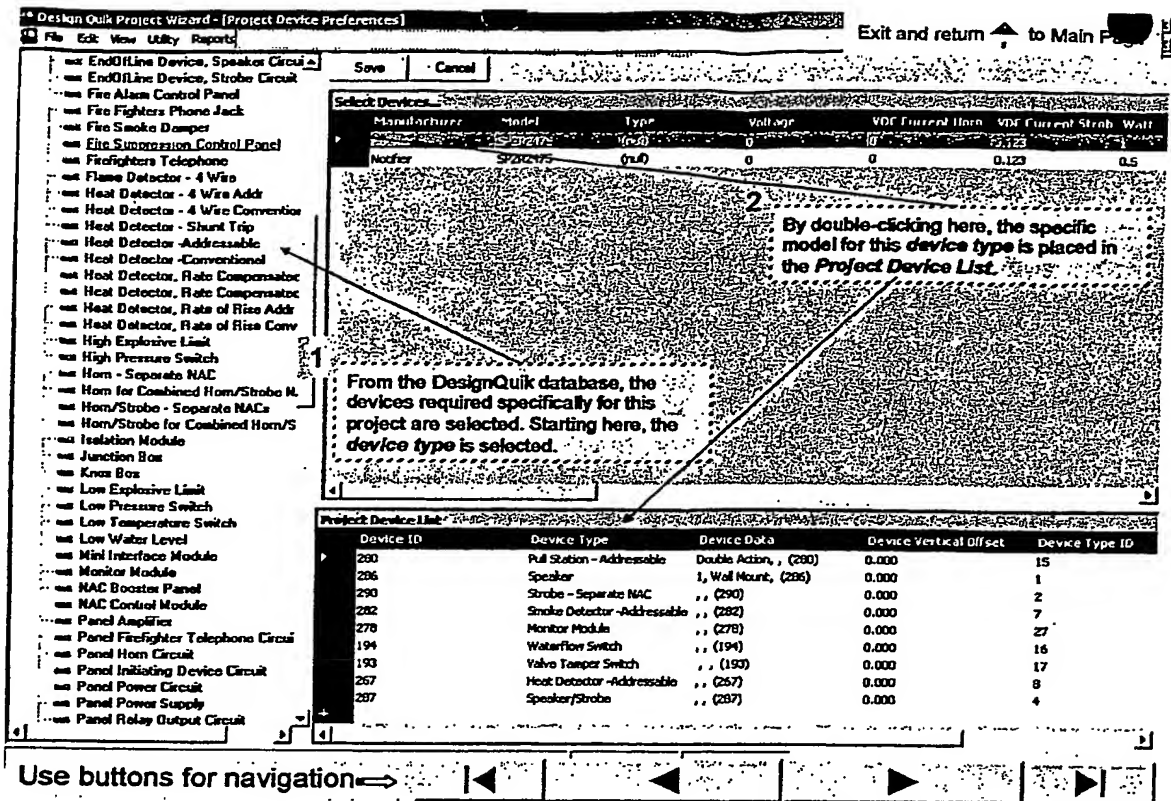
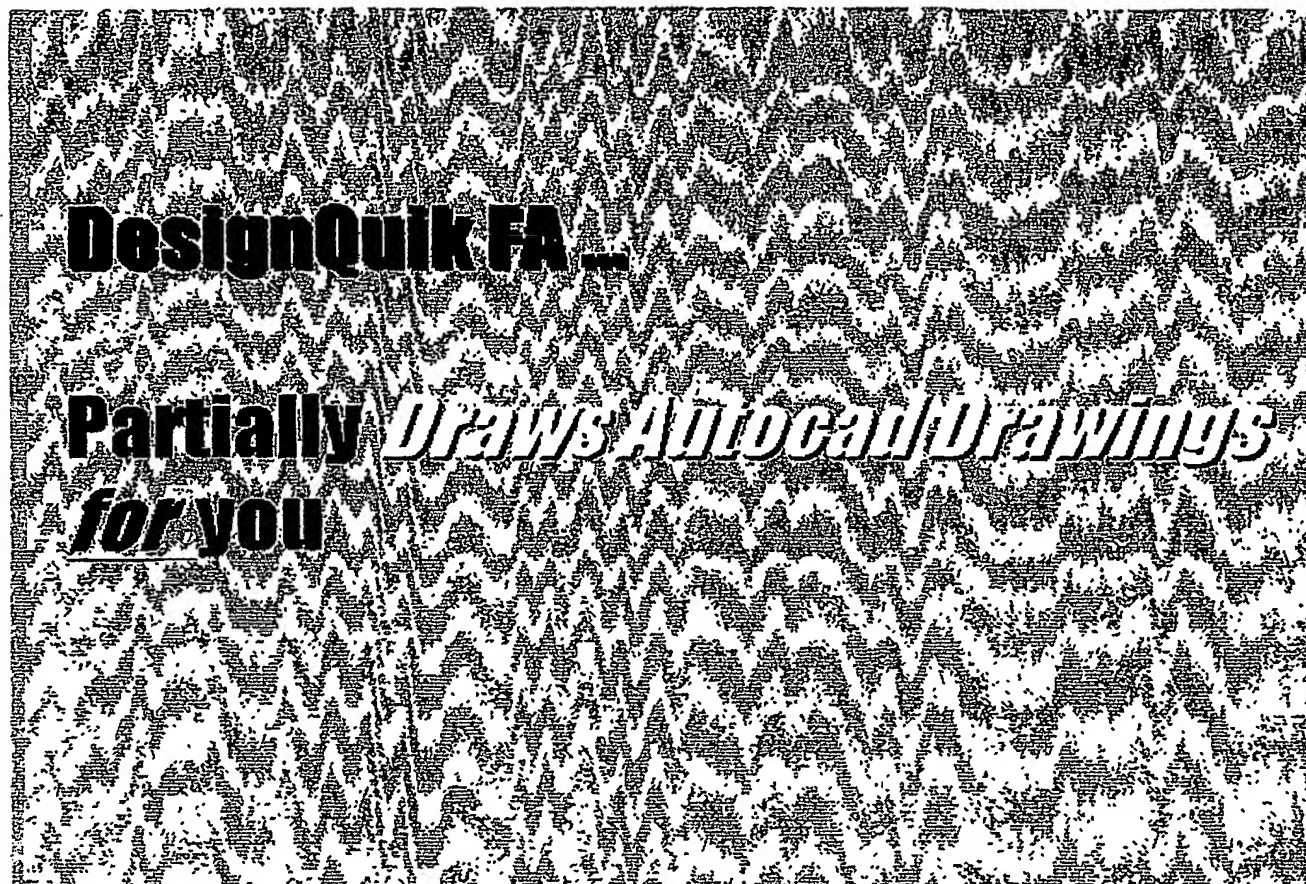


FIG. 3



F.G.4



**FIG. 5**

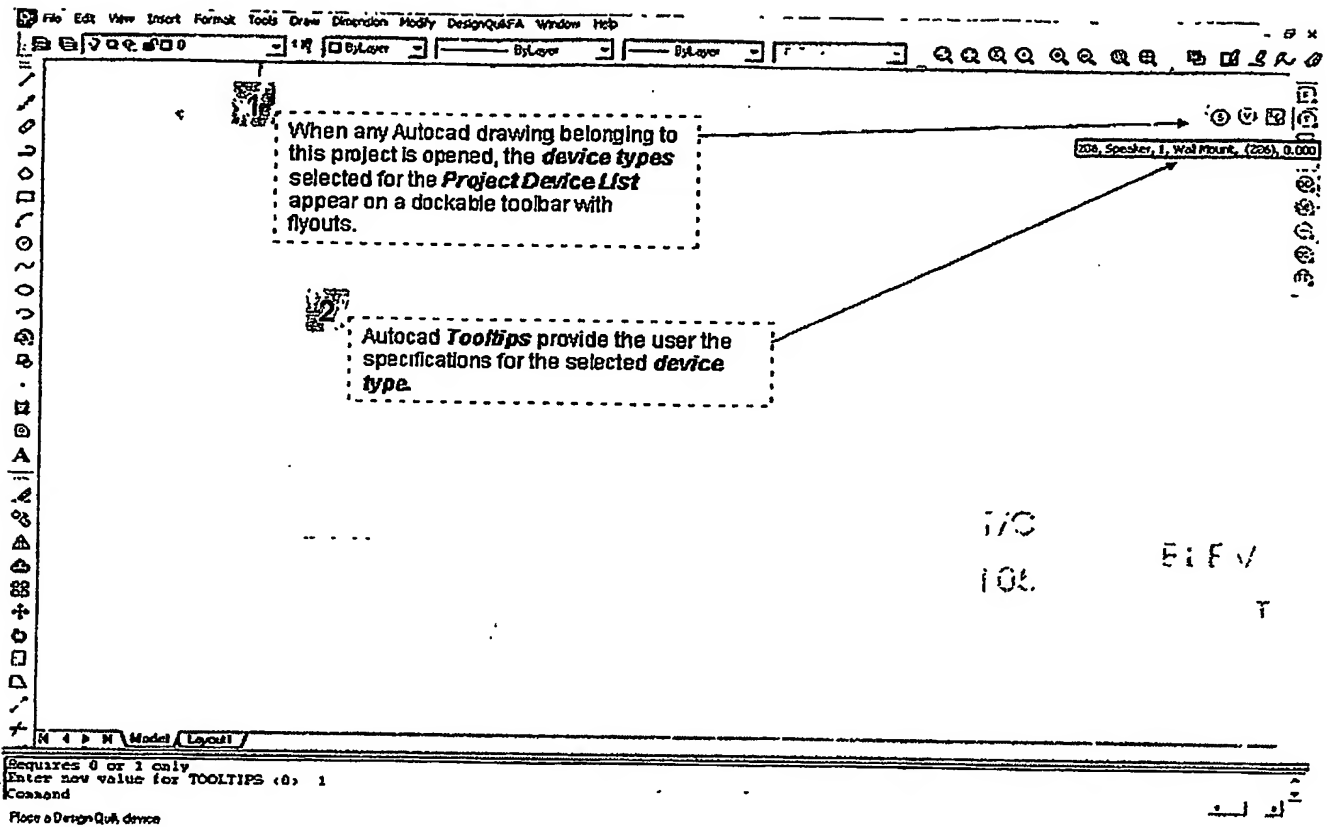


FIG. 6

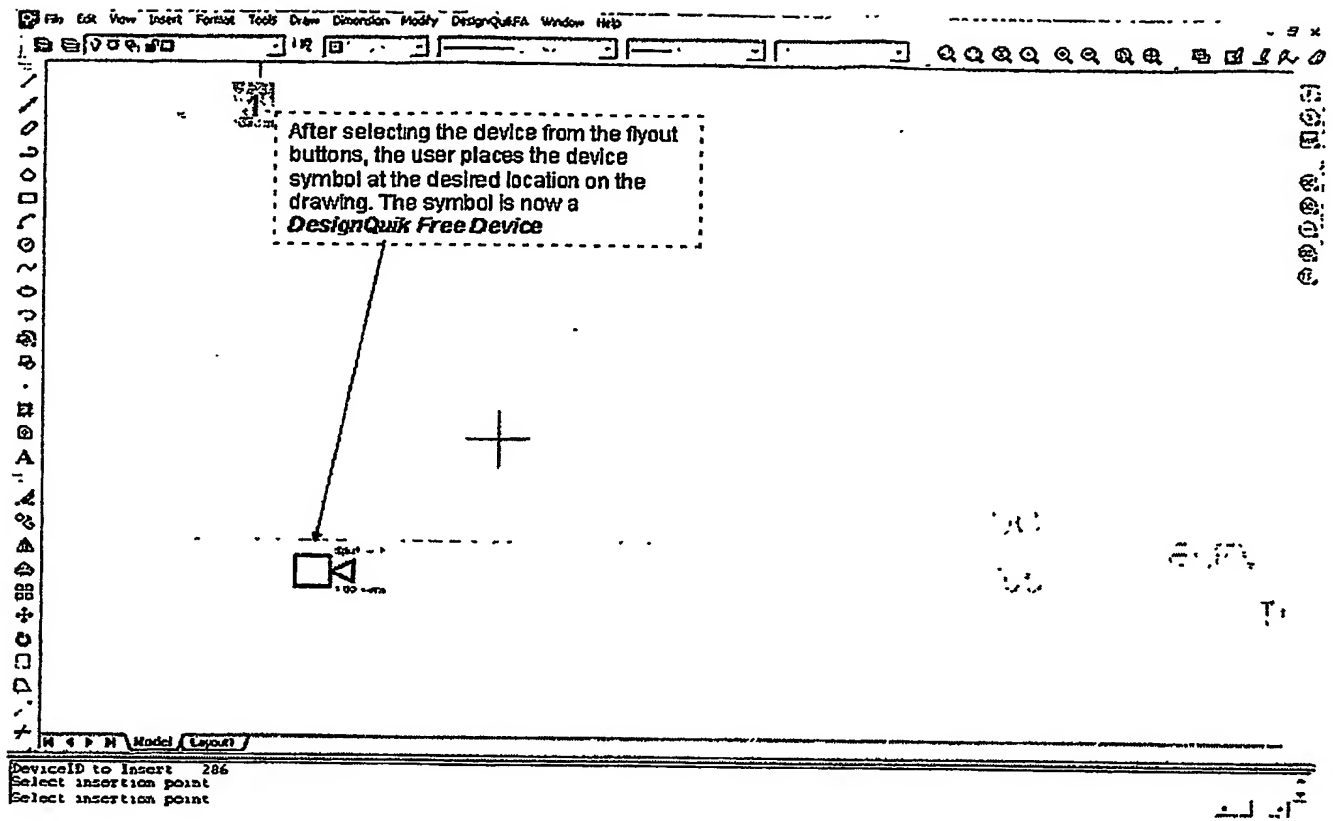


FIG. 7

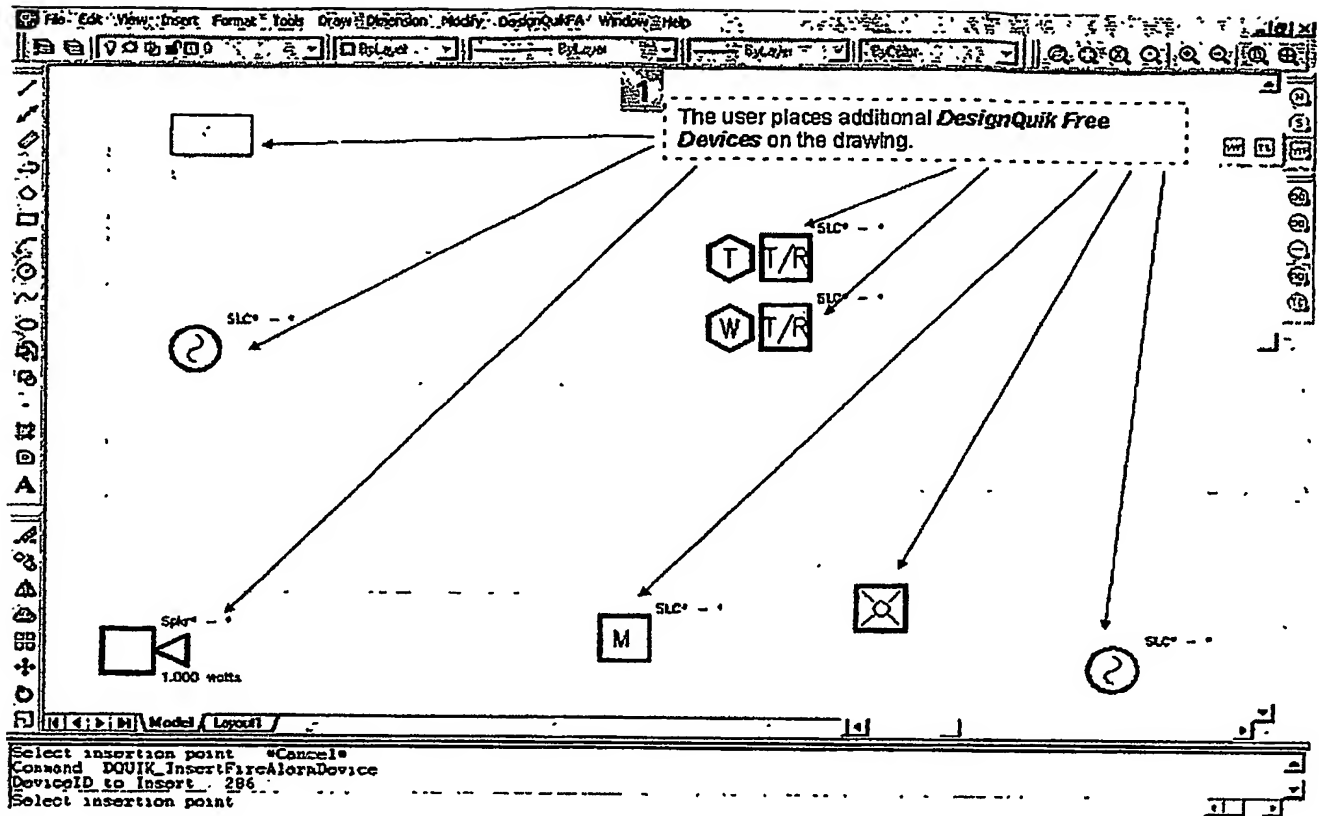


FIG. 8

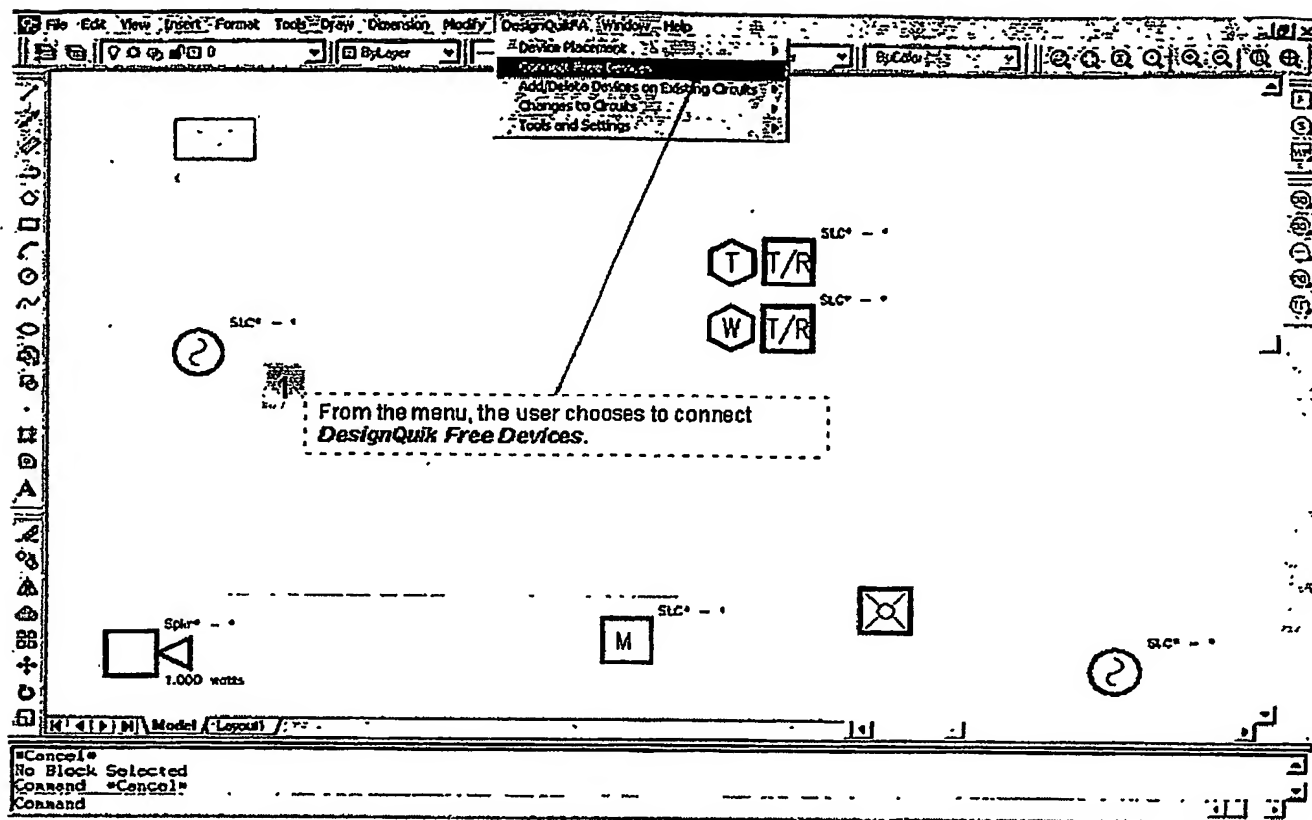


FIG. 9

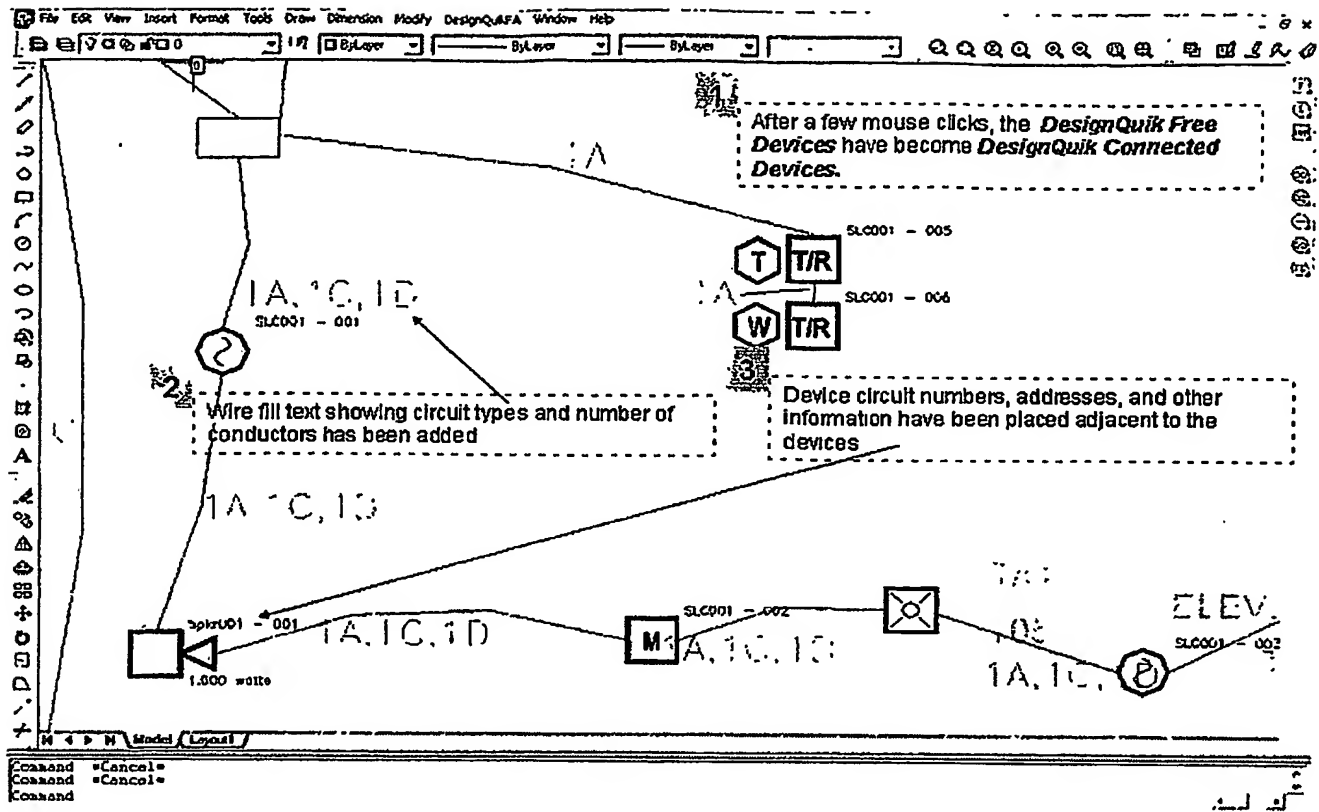


FIG. 10

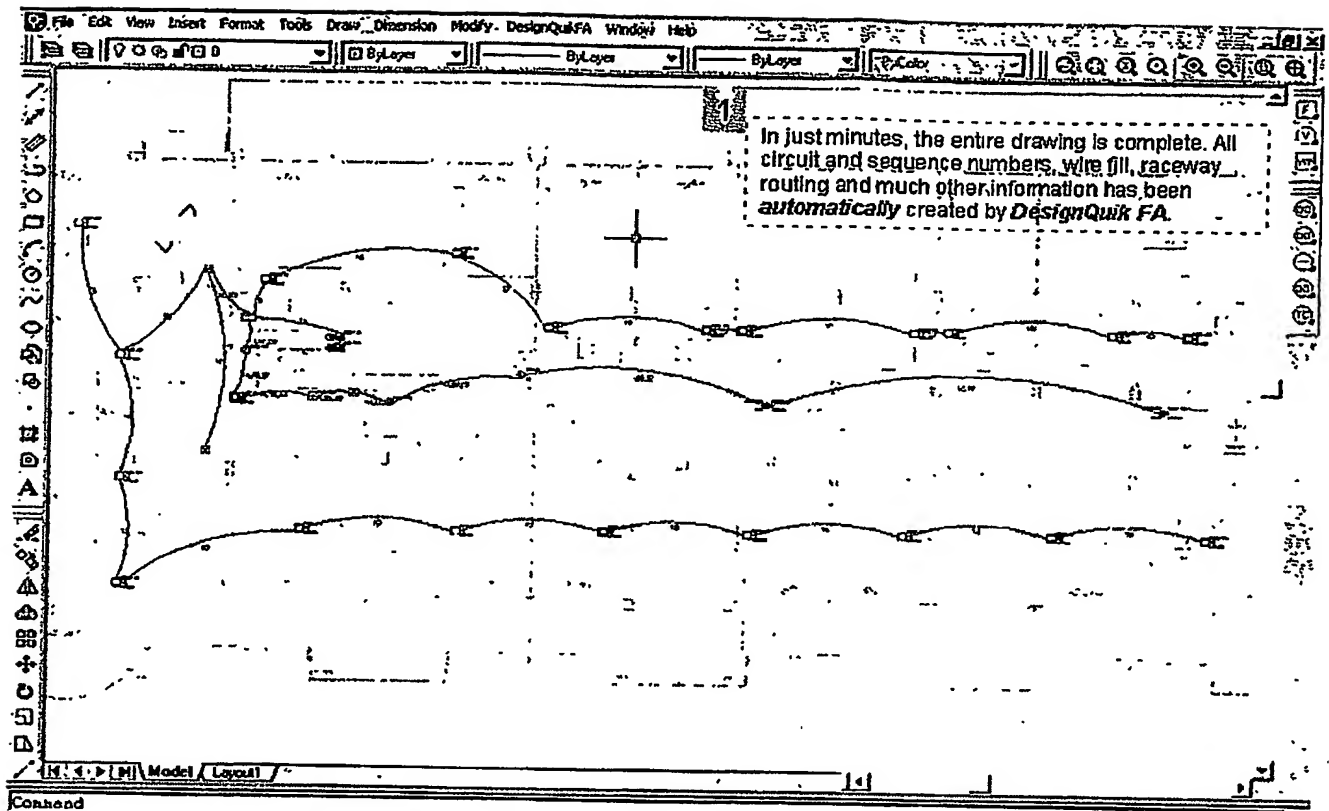
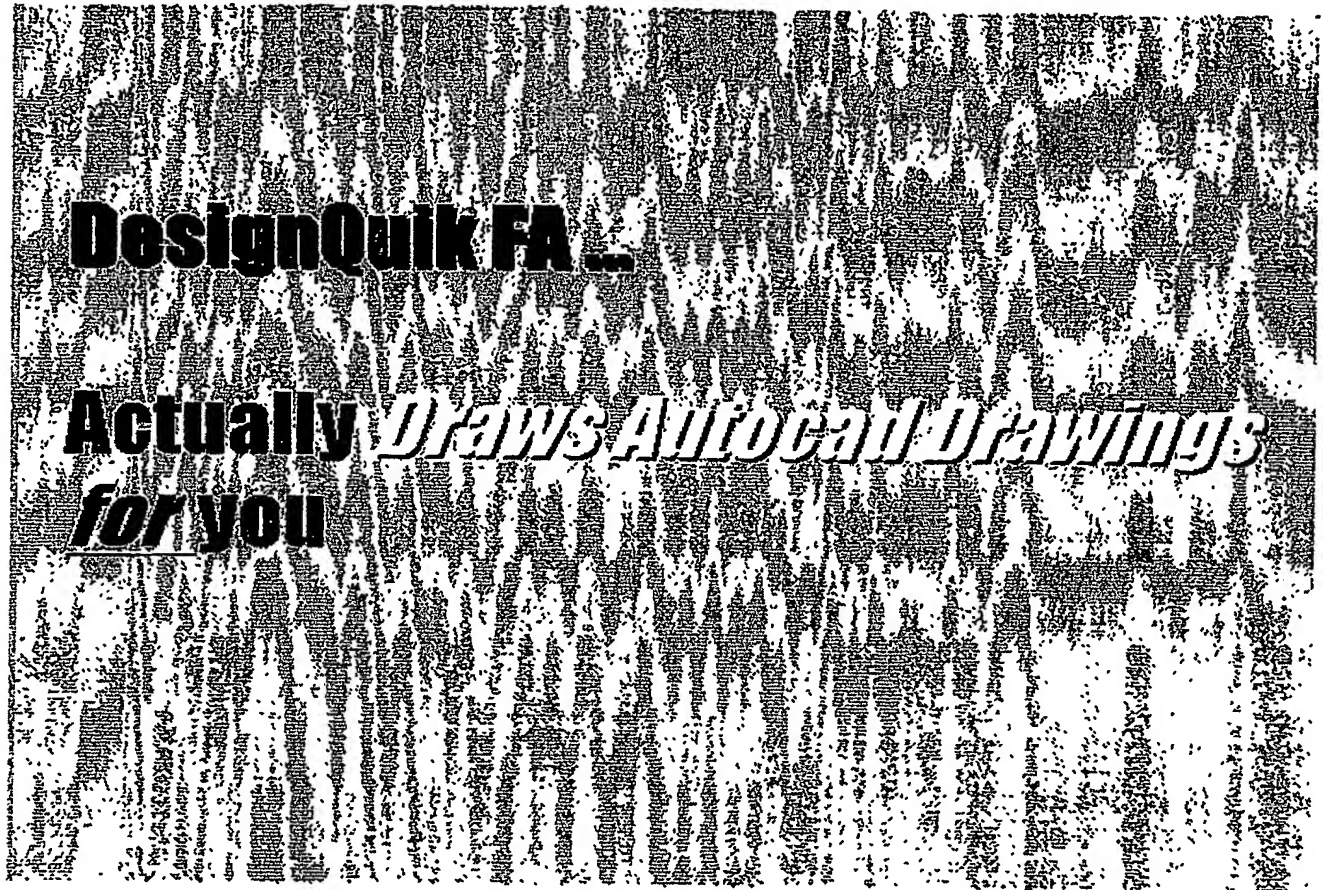


FIG. 11



**FIG. 12**

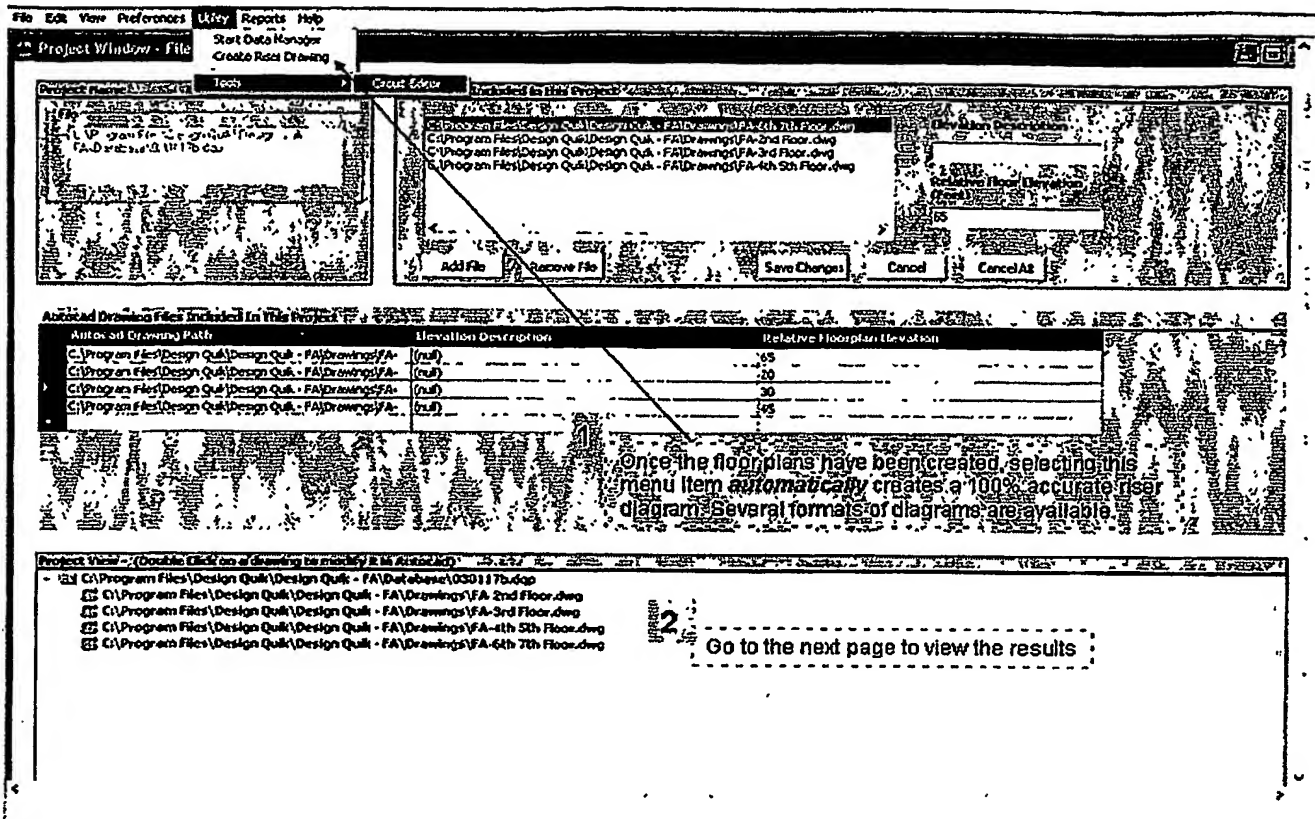


FIG. 13

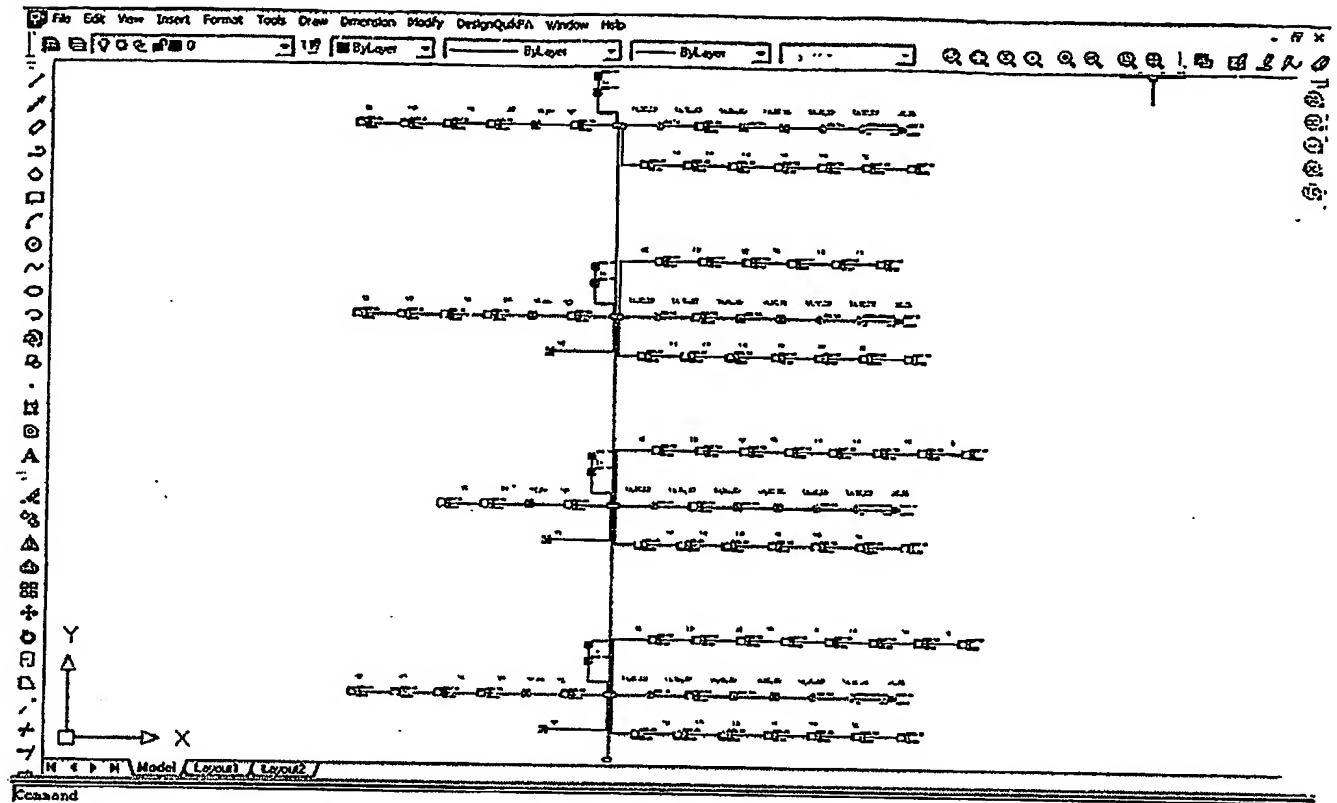


FIG. 14

SUBSTITUTE SHEET (RULE 26)



FIG. 15

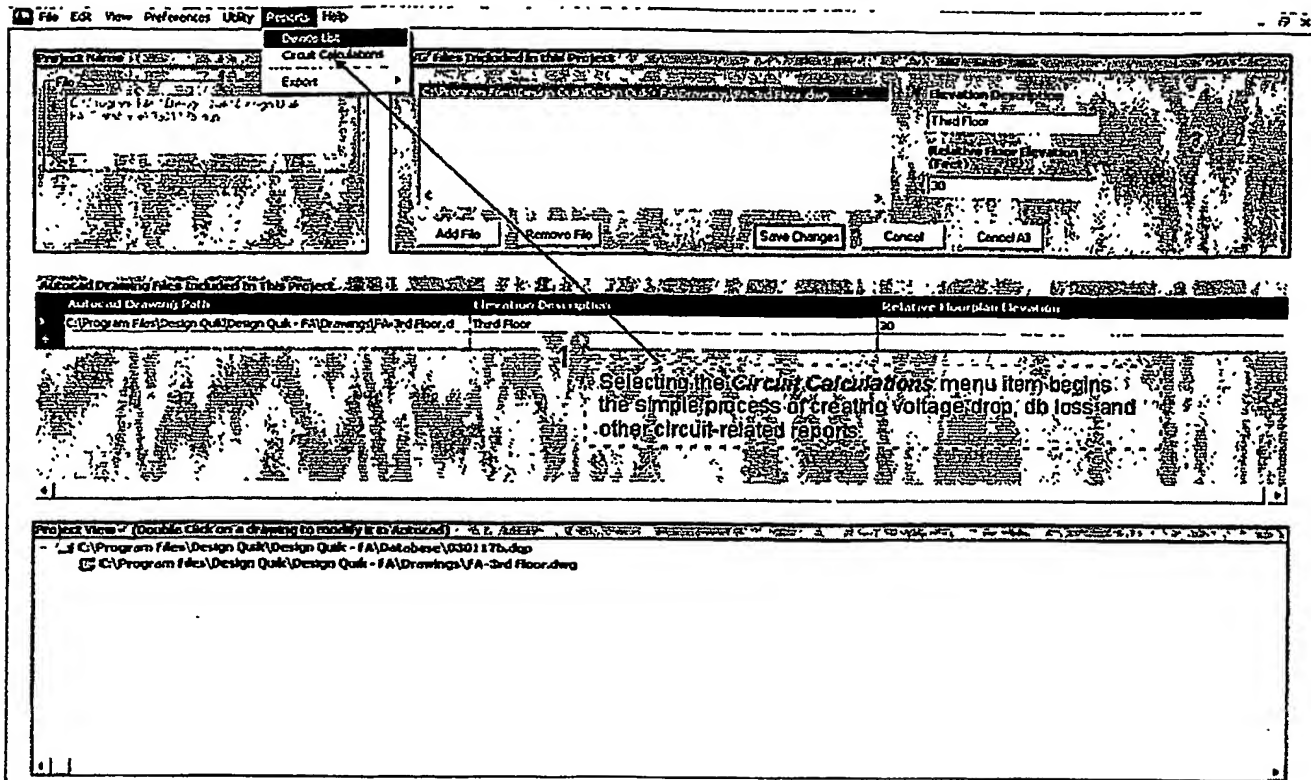


FIG. 16

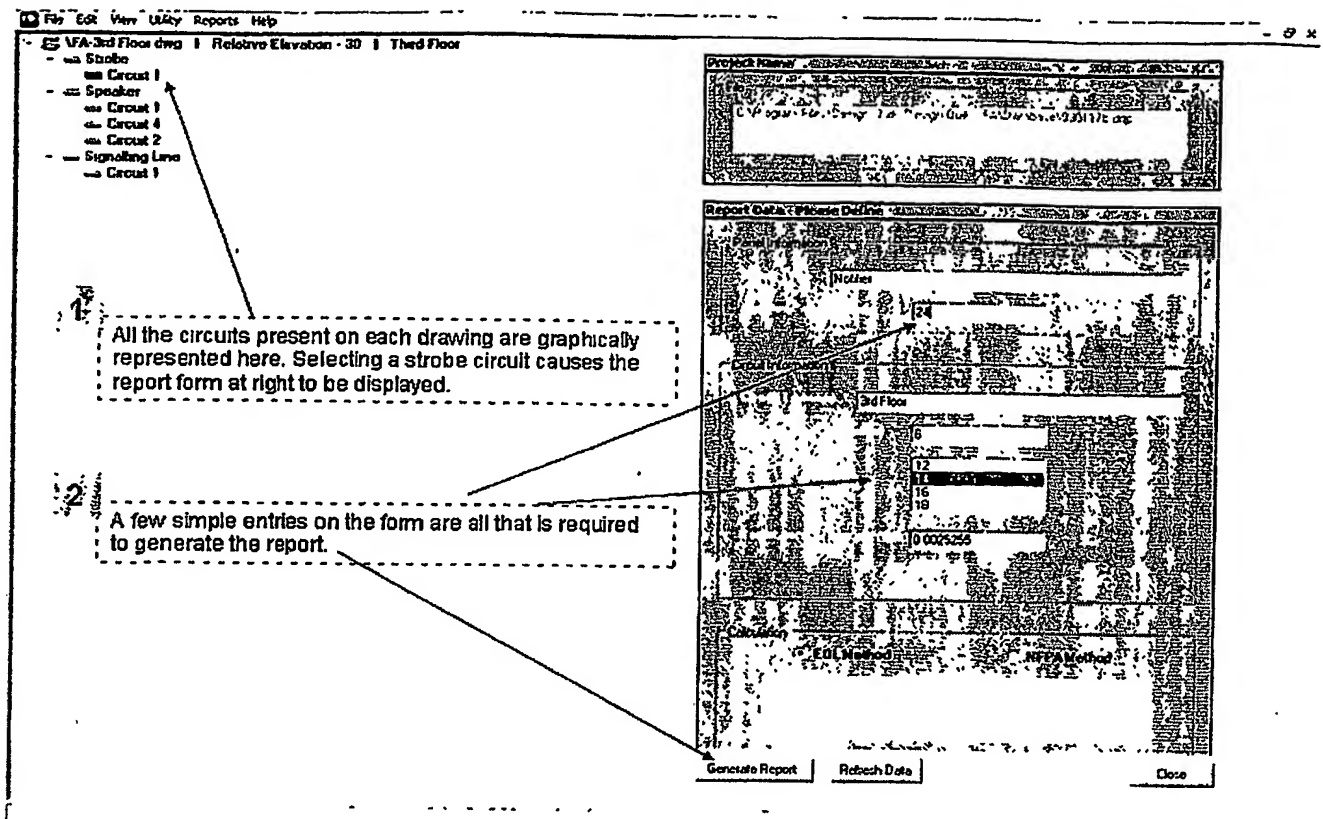


FIG. 17



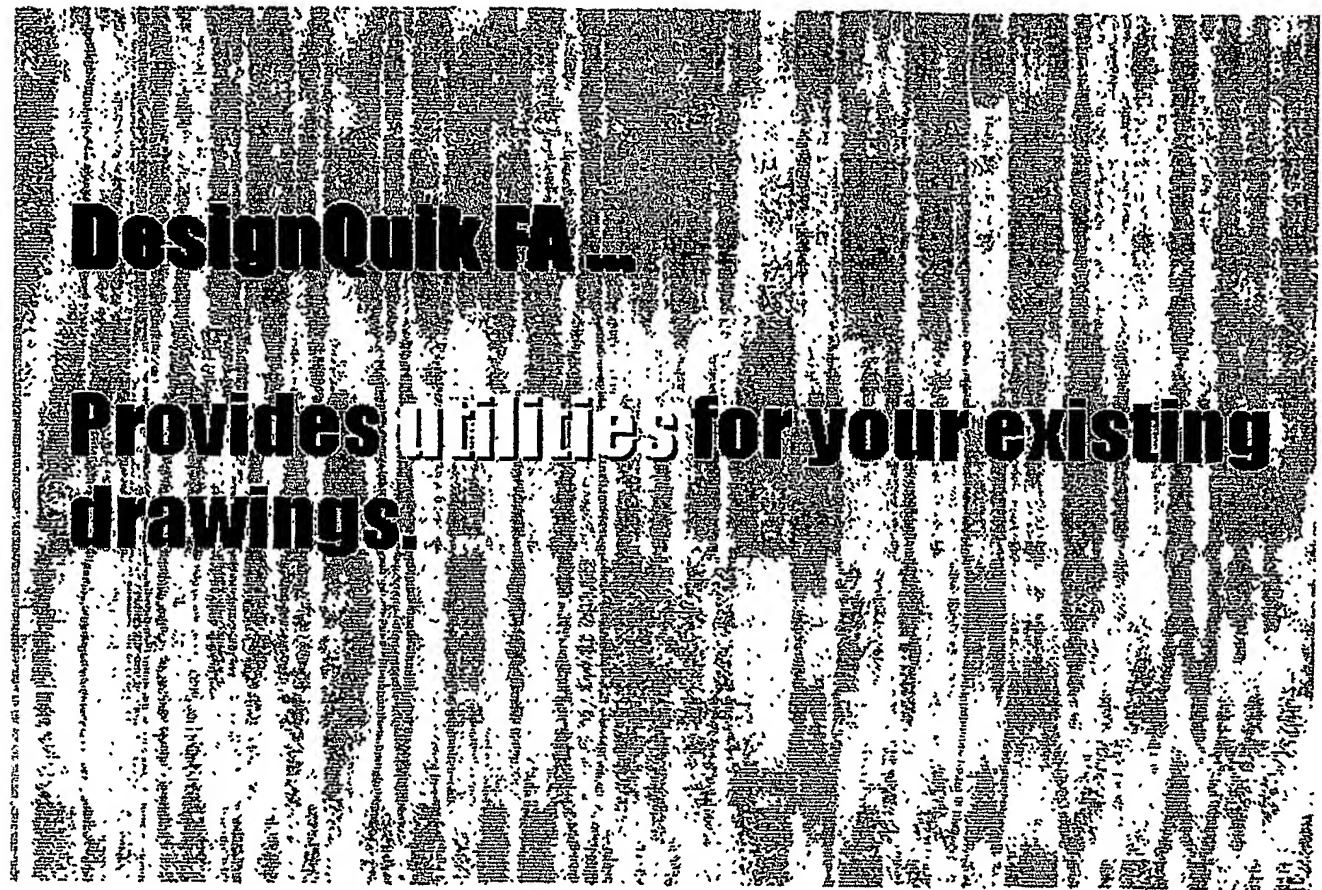


FIG. 19

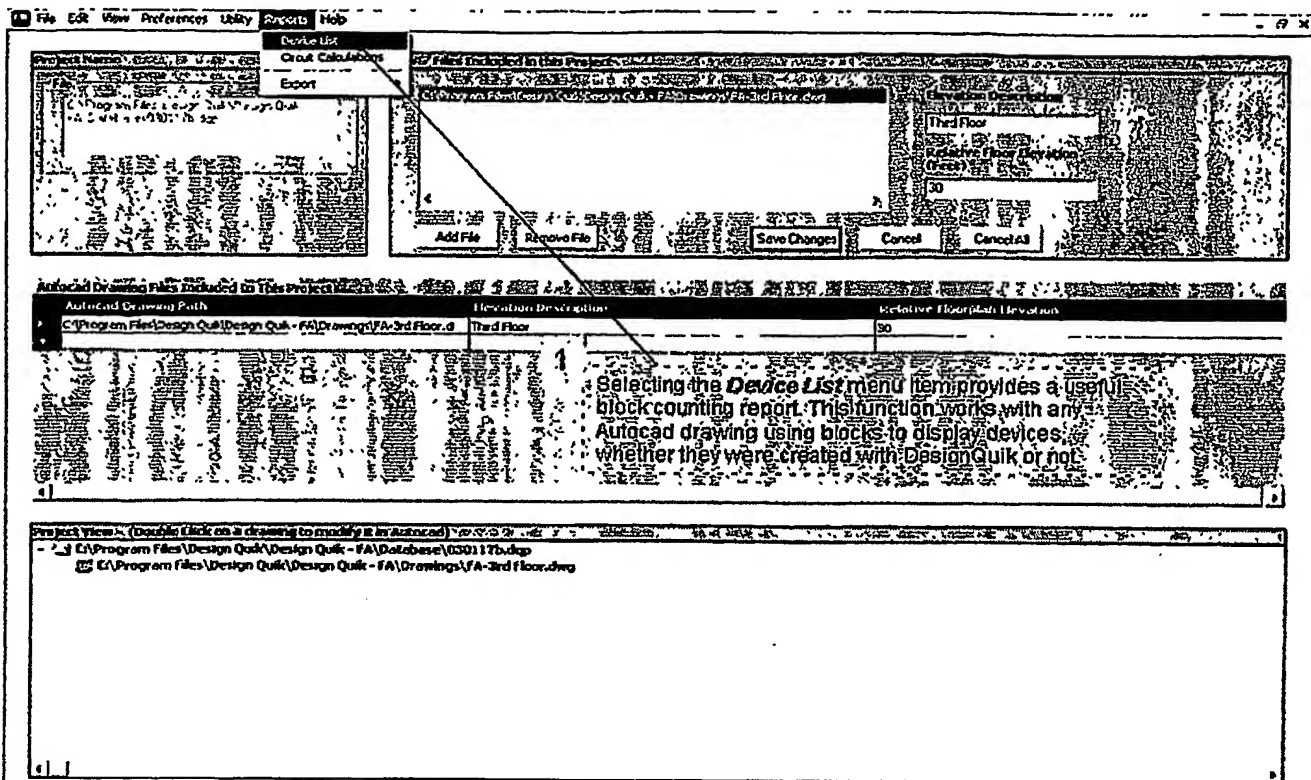


FIG. 20

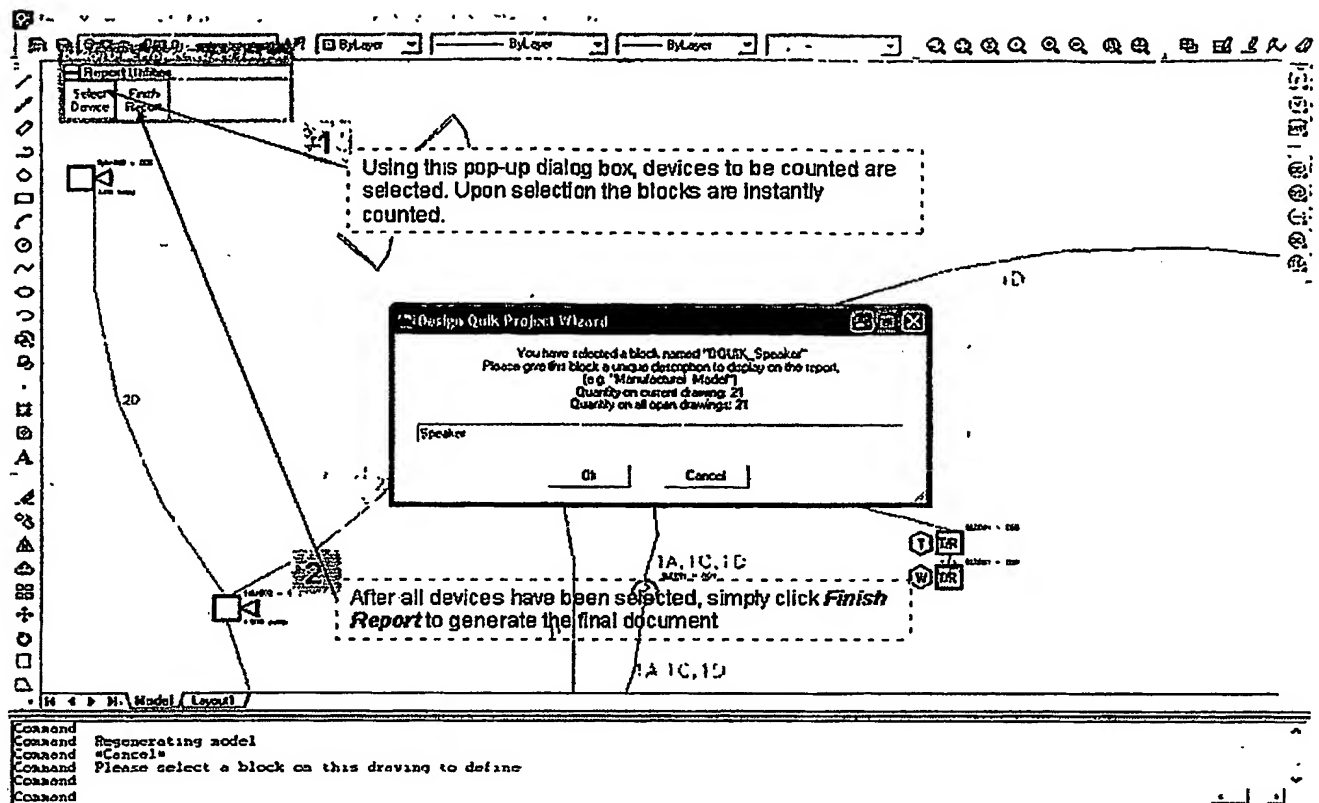


FIG. 21

A					B		C		D	E
Drawing Name					Block Name	Device Name	Quantity			
1	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-3rd Floor.dwg				DDUK_Speaker	Speaker		21		
2	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-3rd Floor.dwg				DDUK_StrobeSeparateNAC	Strobe Only		3		
3	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-3rd Floor.dwg				DDUK_SmokeDetectorAddressable	Addressable Smoke Detector		2		
4	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-3rd Floor.dwg				DDUK_MonitorModule	Monitor Module		2		
5	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-3rd Floor.dwg				DDUK_VaneTamperswitch	Tamper Switch		1		
6	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-3rd Floor.dwg				DDUK_WaterFlowSwitch	Waterflow Switch		1		
7	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-3rd Floor.dwg				DDUK_PullStationAddr	Manual Pull Station		1		
8	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-3rd Floor.dwg				DDUK_HeatDetectorAddressable	Heat Detector		1		
9	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-3rd Floor.dwg				DDUK_SpeakerStrobe	Speaker Strobe		2		
10	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-3rd Floor.dwg									
11										
12	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-4th Floor.dwg				DDUK_Speaker	Speaker		32		
13	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-4th Floor.dwg				DDUK_StrobeSeparateNAC	Strobe Only		6		
14	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-4th Floor.dwg				DDUK_SmokeDetectorAddressable	Addressable Smoke Detector		2		
15	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-4th Floor.dwg				DDUK_MonitorModule	Monitor Module		6		
16	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-4th Floor.dwg				DDUK_VaneTamperswitch	Tamper Switch		3		
17	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-4th Floor.dwg				DDUK_WaterFlowSwitch	Waterflow Switch		3		
18	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-4th Floor.dwg				DDUK_PullStationAddr	Manual Pull Station		1		
19	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-4th Floor.dwg				DDUK_HeatDetectorAddressable	Heat Detector		1		
20	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-4th Floor.dwg				DDUK_SpeakerStrobe	Speaker Strobe		2		
21										
22	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-5th Floor.dwg				DDUK_Speaker	Speaker		19		
23	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-5th Floor.dwg				DDUK_StrobeSeparateNAC	Strobe Only		4		
24	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-5th Floor.dwg				DDUK_SmokeDetectorAddressable	Addressable Smoke Detector		2		
25	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-5th Floor.dwg				DDUK_MonitorModule	Monitor Module		4		
26	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-5th Floor.dwg				DDUK_VaneTamperswitch	Tamper Switch		2		
27	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-5th Floor.dwg				DDUK_WaterFlowSwitch	Waterflow Switch		2		
28	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-5th Floor.dwg				DDUK_PullStationAddr	Manual Pull Station		1		
29	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-5th Floor.dwg				DDUK_HeatDetectorAddressable	Heat Detector		1		
30	C:\Program Files\Design Quik\Design Quik - FA\Drawings\FA-5th Floor.dwg				DDUK_SpeakerStrobe	Speaker Strobe		2		
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
A report of all devices by project drawing and with a totalizing section is the result.					Summary Report of Device Counts					
					Speaker					72
					Strobe Only					13
					Addressable Smoke Detector					6
					Monitor Module					12
					Tamper Switch					6
					Waterflow Switch					6
					Manual Pull Station					3
					Heat Detector					3
					Speaker Strobe					6

FIG. 22

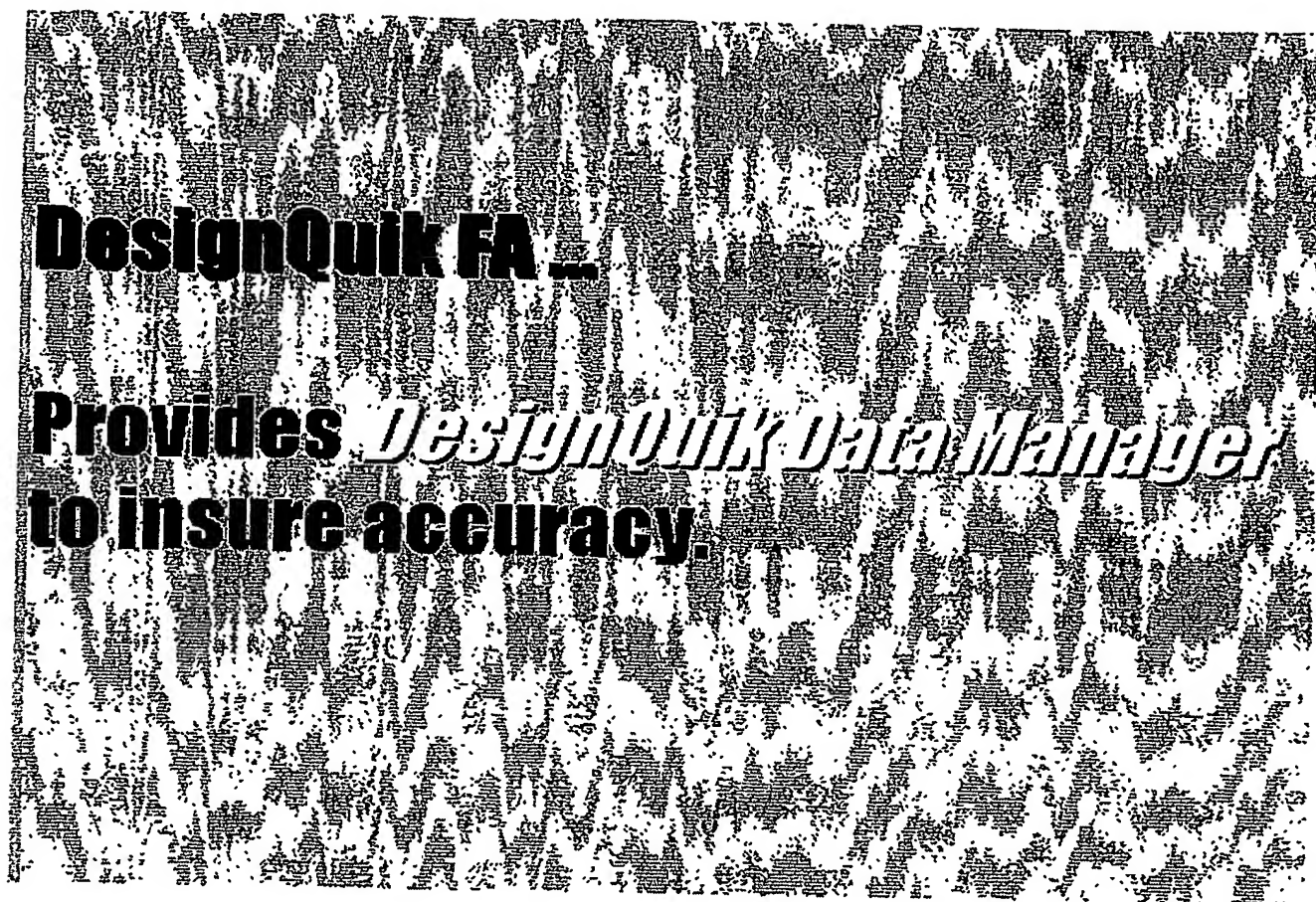


FIG. 23

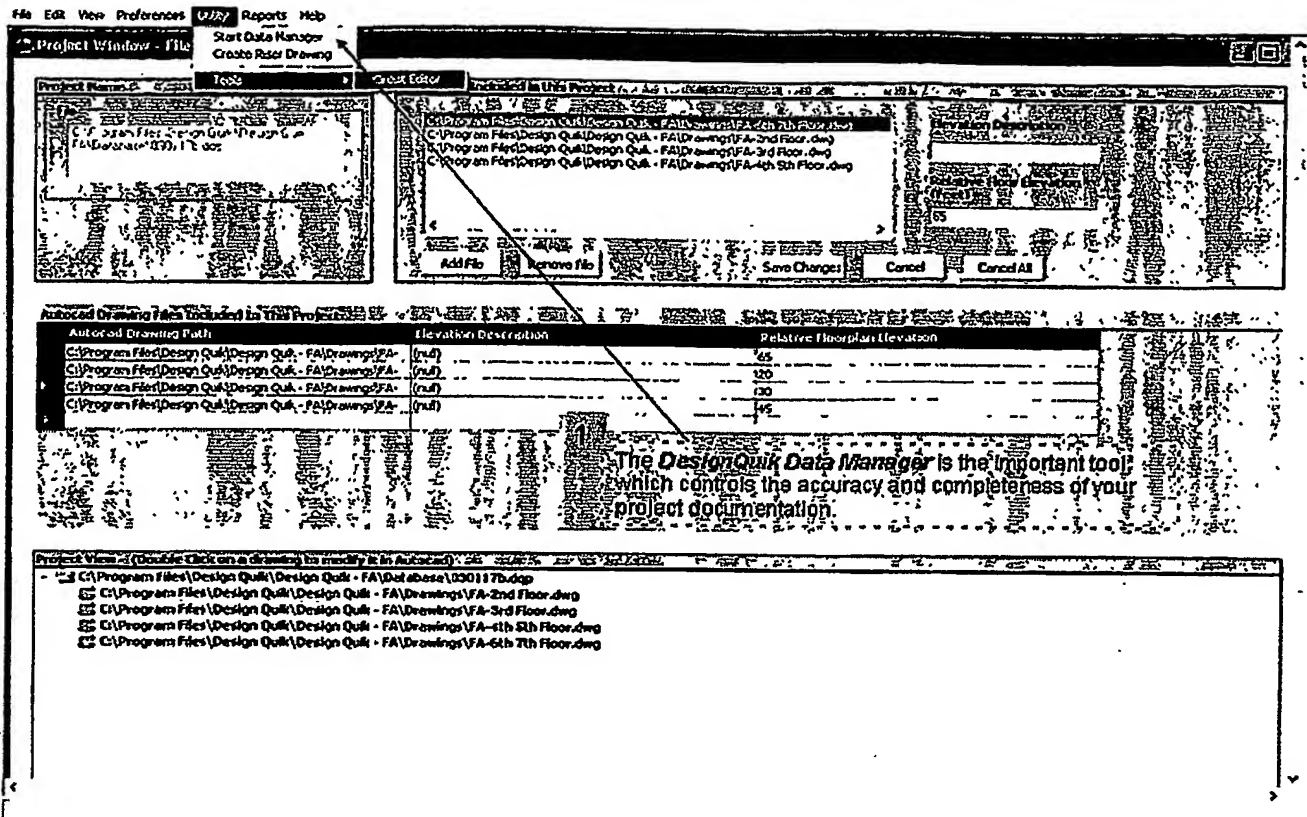


FIG. 24

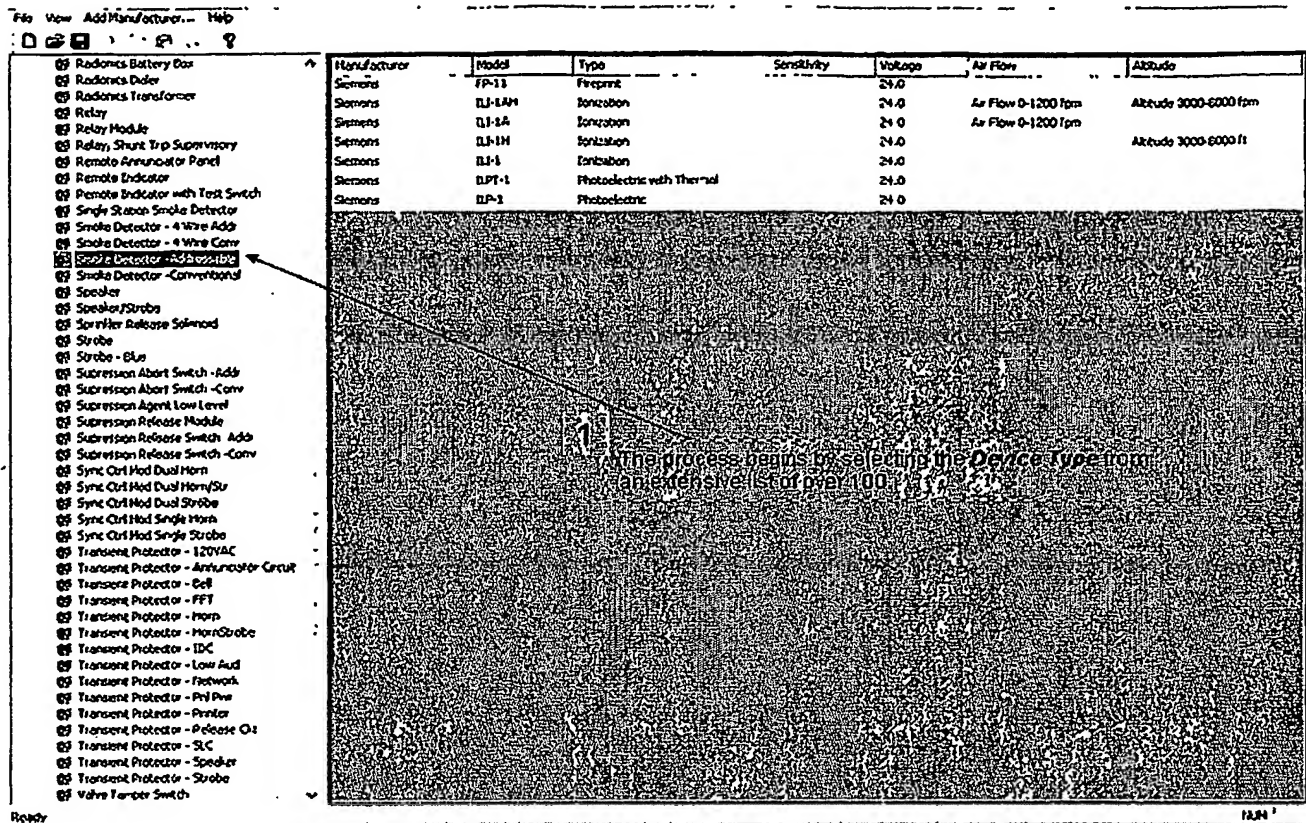


FIG. 25

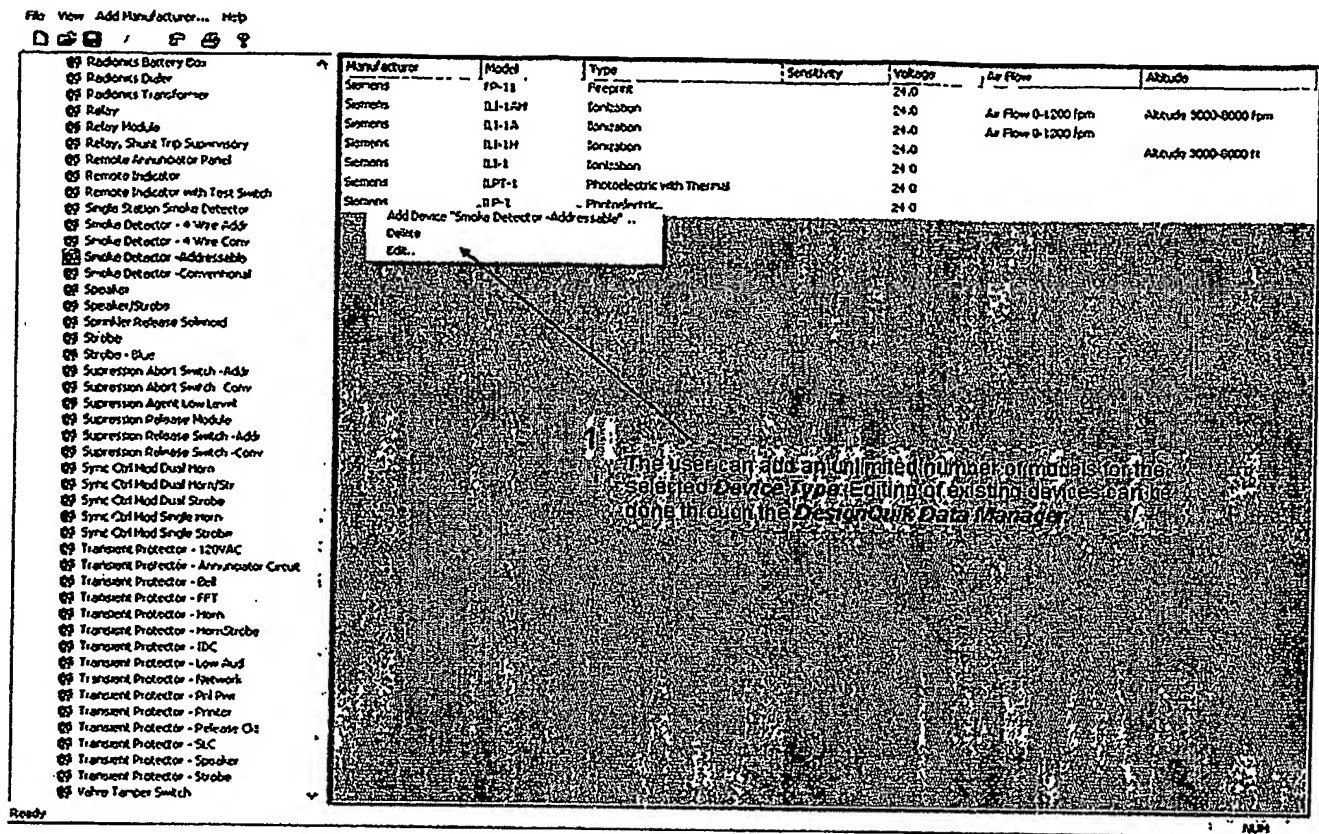


FIG. 26

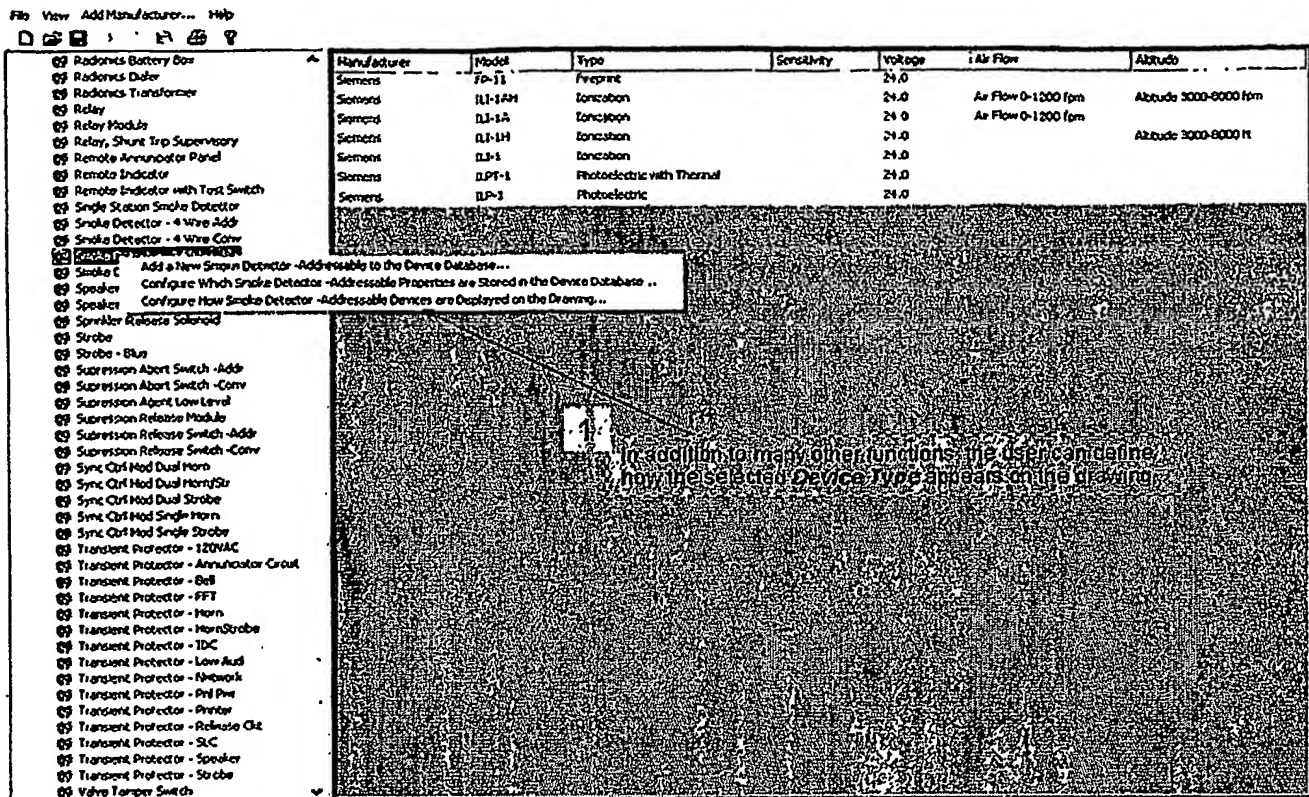


FIG. 27

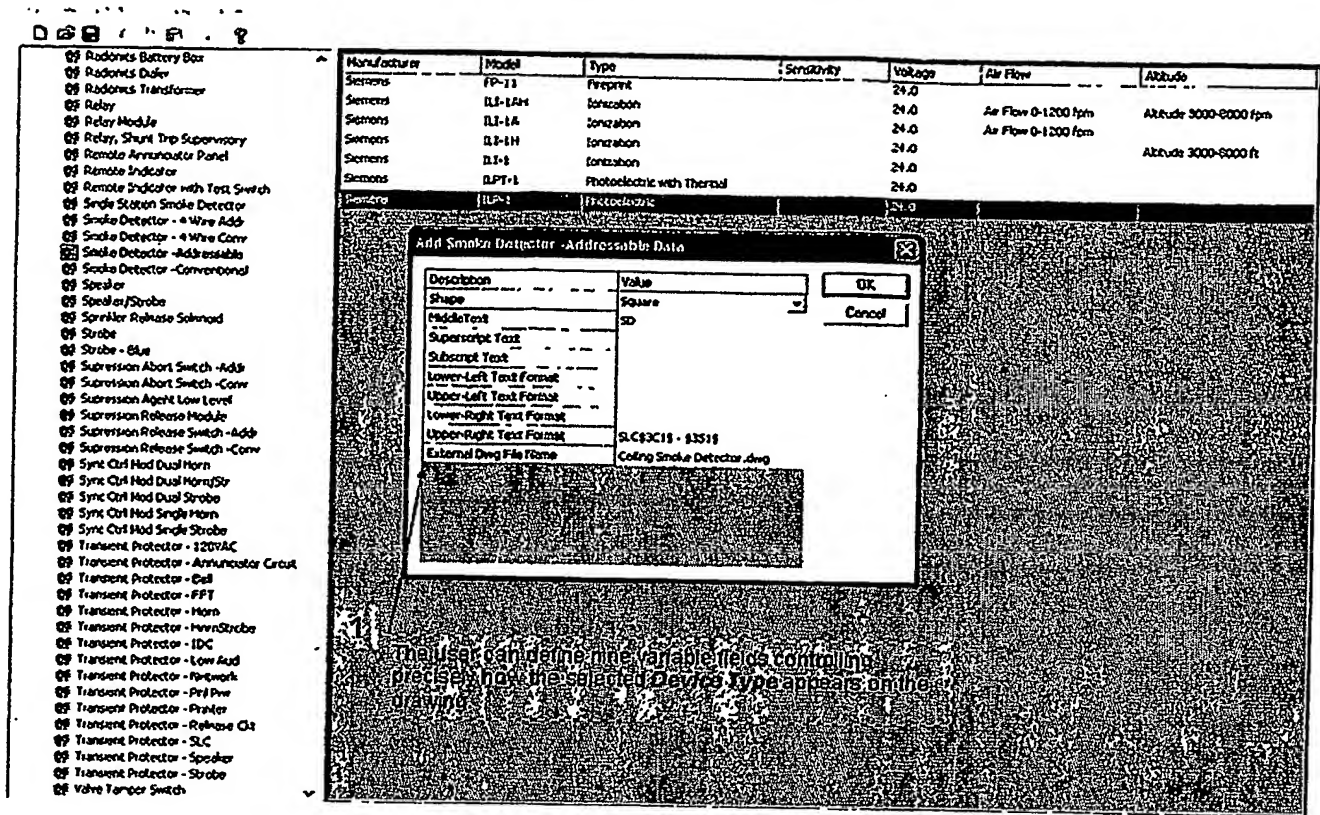


FIG. 28

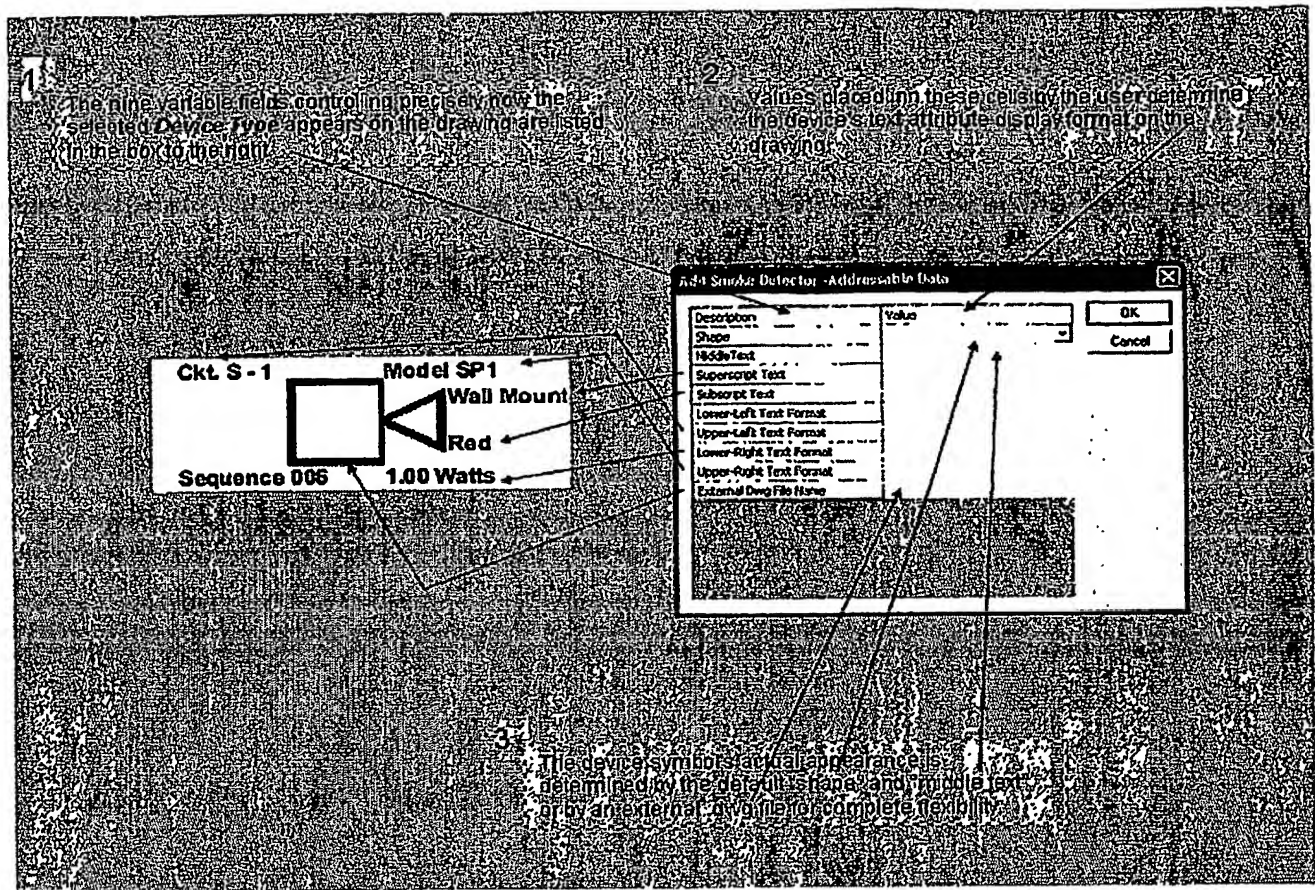


FIG. 29

# **DesignQuik FA ...**

**•Organizes Your Project Files**

**•Partially *Draws Autocad Drawings for you***

**•Actually *Draws Autocad Drawings for you***

**•Creates Sophisticated *Reports for you***

**•Provides *Utilities for your existing drawings***

**•Provides *DesignQuik Data Manager to insure accuracy***

**FIG. 30**

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## **Introduction**

DesignQuik<sup>®</sup>-FA is a tool that links fire alarm system design with document preparation. It assists the user with speedy preparation of fire alarm system floor plans using AutoCAD version 2002 or higher.

DesignQuik<sup>®</sup> uses the information from the floor plans to generate other critical submittal documents such as riser diagrams, voltage drop calculations, and system bills of material.

The following easy steps are used to develop complete system documentation:

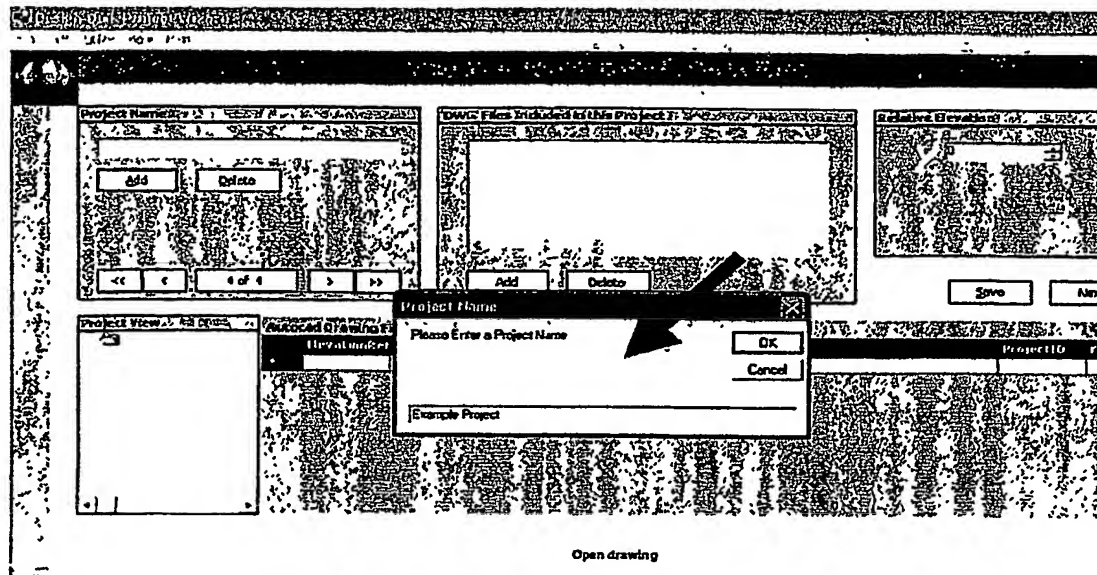
1. Start DesignQuik<sup>®</sup> software
2. Define the project
  - 2.1. Project name
  - 2.2. List project floor plan files (.dwg files) and set relative elevations
3. Prepare floor plans using AutoCAD
  - 3.1. Select fire alarm devices from a user-defined database
  - 3.2. Place devices on the floor plan.
  - 3.3. Connect devices by simple mouse click.
4. Request documents by mouse click
  - 4.1. Floor plans
  - 4.2. Riser diagram
  - 4.3. Panel diagram
  - 4.4. Voltage and decibel drop calculations
  - 4.5. Equipment list/bill of material

Detailed instruction follow this page. Go to [Next Page](#)

[\[Previous Page\]](#)[\[Next Page\]](#)[\[Return To Beginning\]](#)**FIG. 31**

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The "Project Name" dialog box will be displayed. Type the project name and click OK.



The screen display will now look like the figure below. Now add a floor plan drawing to the project drawing list by clicking on the "Add" button.

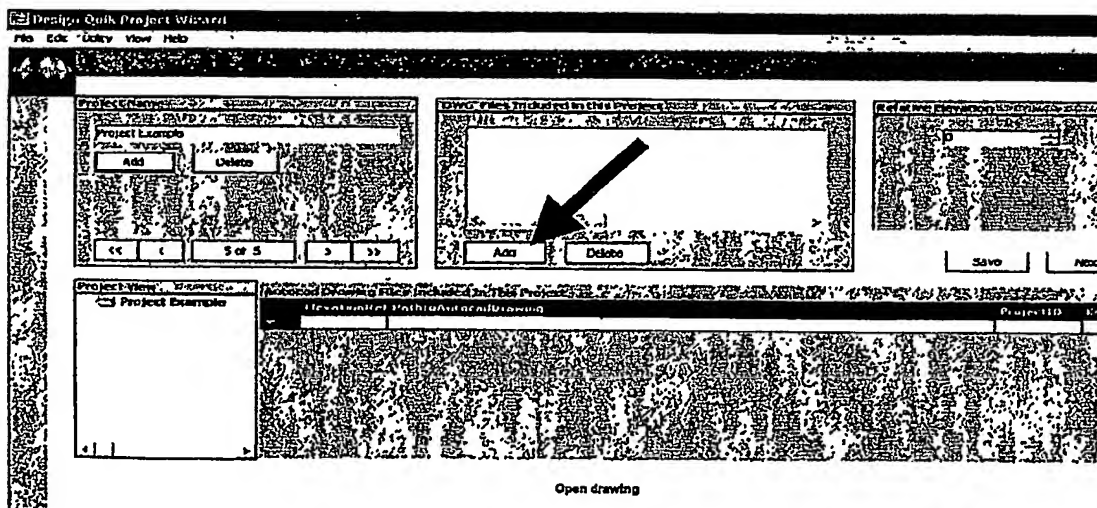
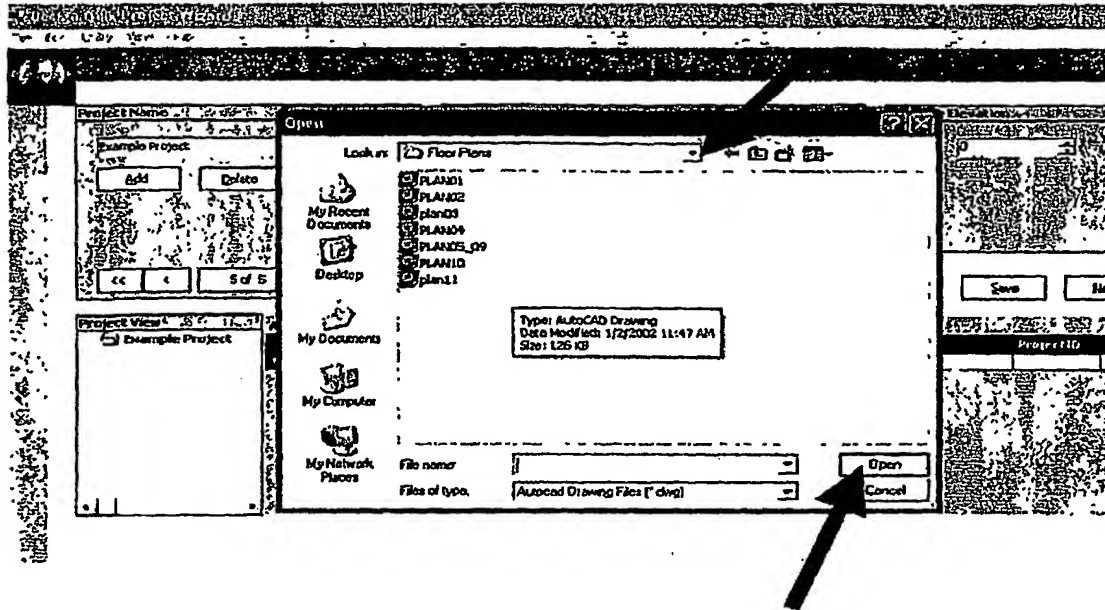
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FIG. 32

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The screen will show the following display. From this screen, it is possible to browse your files and select a drawing to add to the project list. To browse, use the pull down arrow shown below.



Click on the drawing you wish to add to the list, then click the "Open" button. The following screen will be displayed, with the drawing added to the project list.

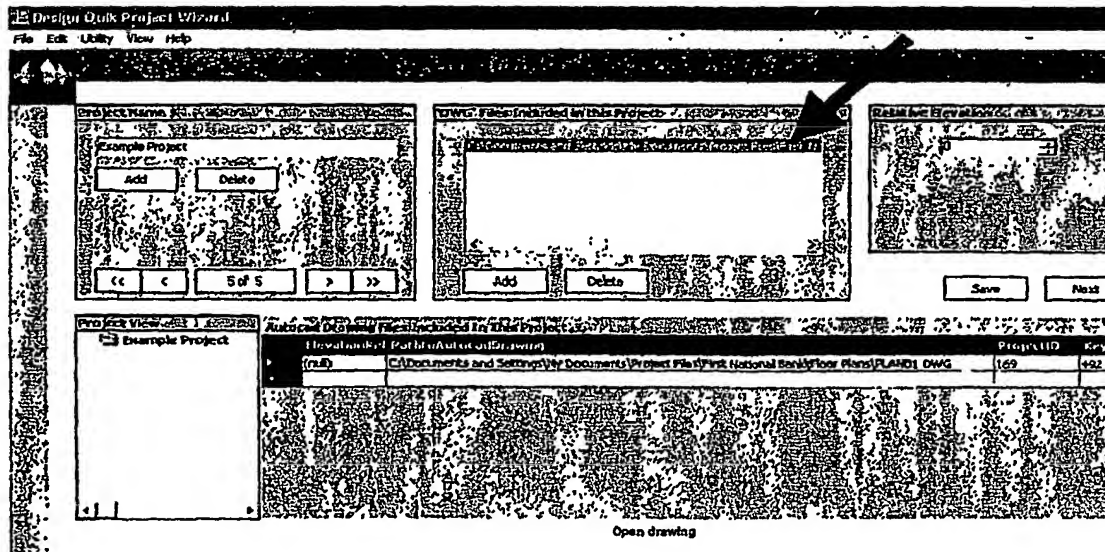
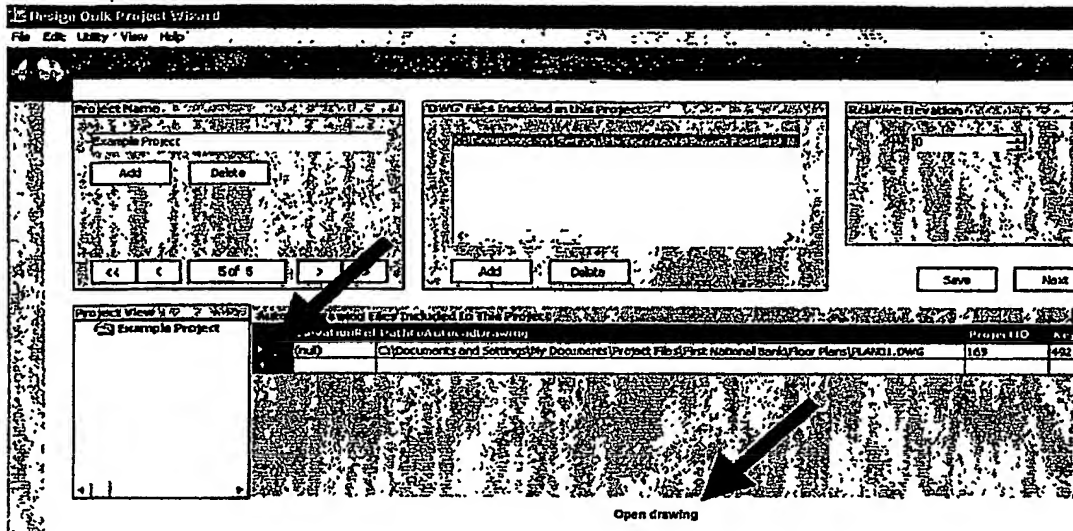


FIG. 33

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# 1. Prepare floor plans using AutoCAD

In order to begin working on a floor plan, open the drawing by selecting it from the drawing list and clicking on the "Open Drawing" button.



AutoCAD will automatically start and the drawing will be opened. In addition to the regular menu items, a "DesignQuik" menu item will be present at the top of the screen.

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**FIG. 34**

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DesignQuik<sup>®</sup> will automatically start AutoCAD and open the drawing. Notice that there is a special menu item for DesignQuik<sup>®</sup> functions.

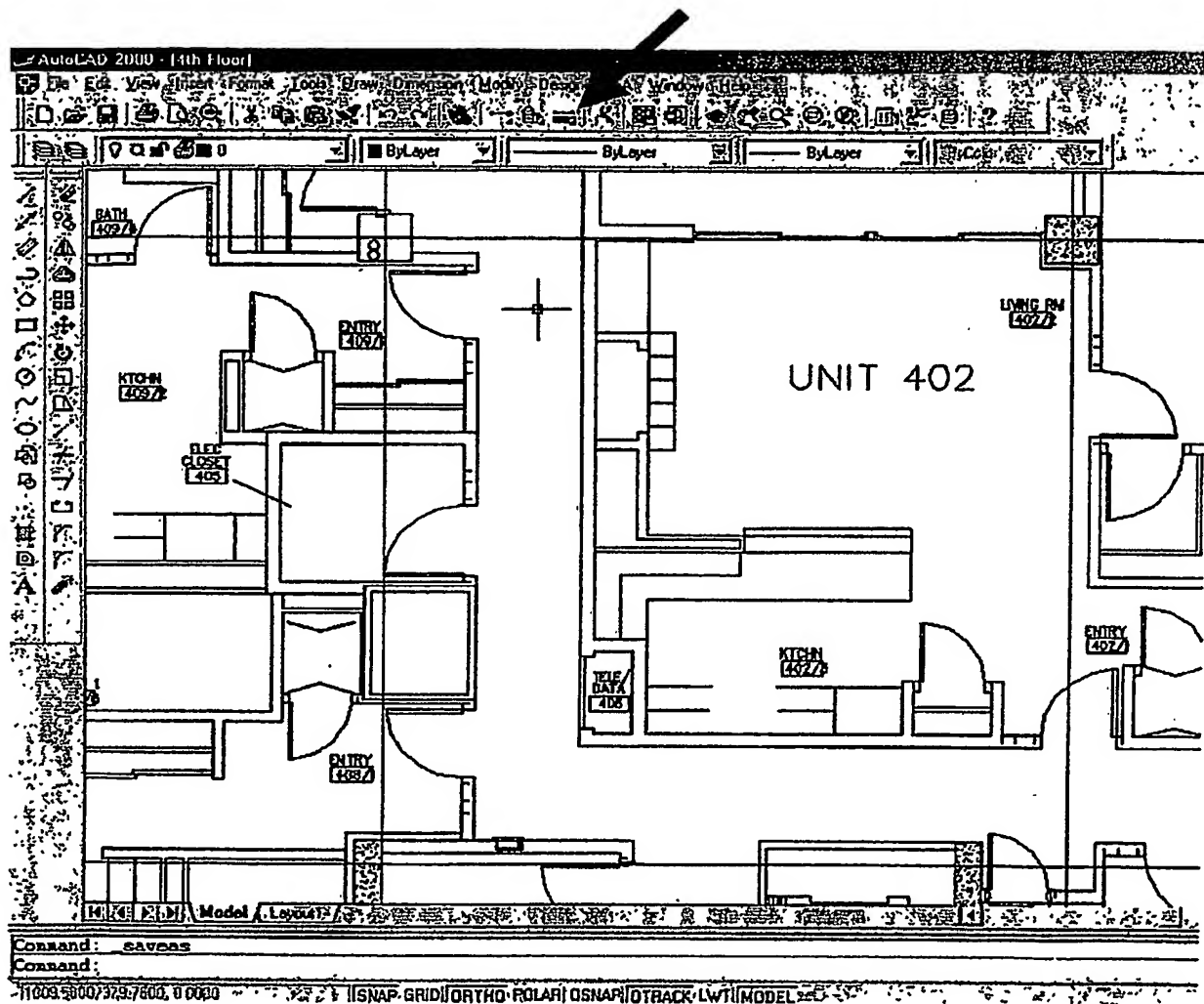
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FIG. 35

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The **DesignQuik**® Project Wizard will automatically start AutoCAD and open the drawing. Notice that there is a special menu item for **DesignQuik**® functions, and toolbars with slide out buttons docked on the right and floating in the model space.

**FIG. 36A**

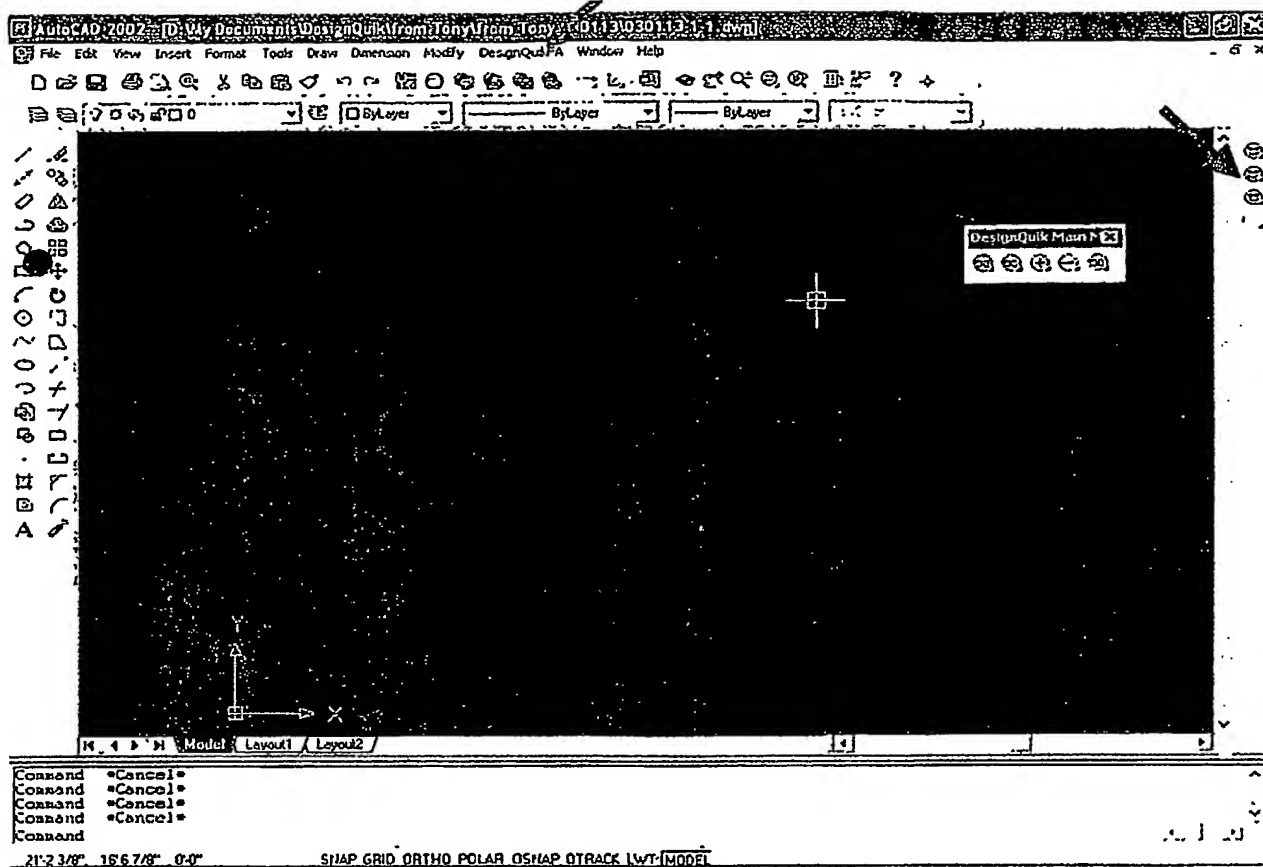


FIG. 36B

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The floating toolbar can be dragged and docked. Each toolbar button represents a DesignQuik command. Each toolbar button on the side toolbar represents a fire alarm device from the Project Device List.

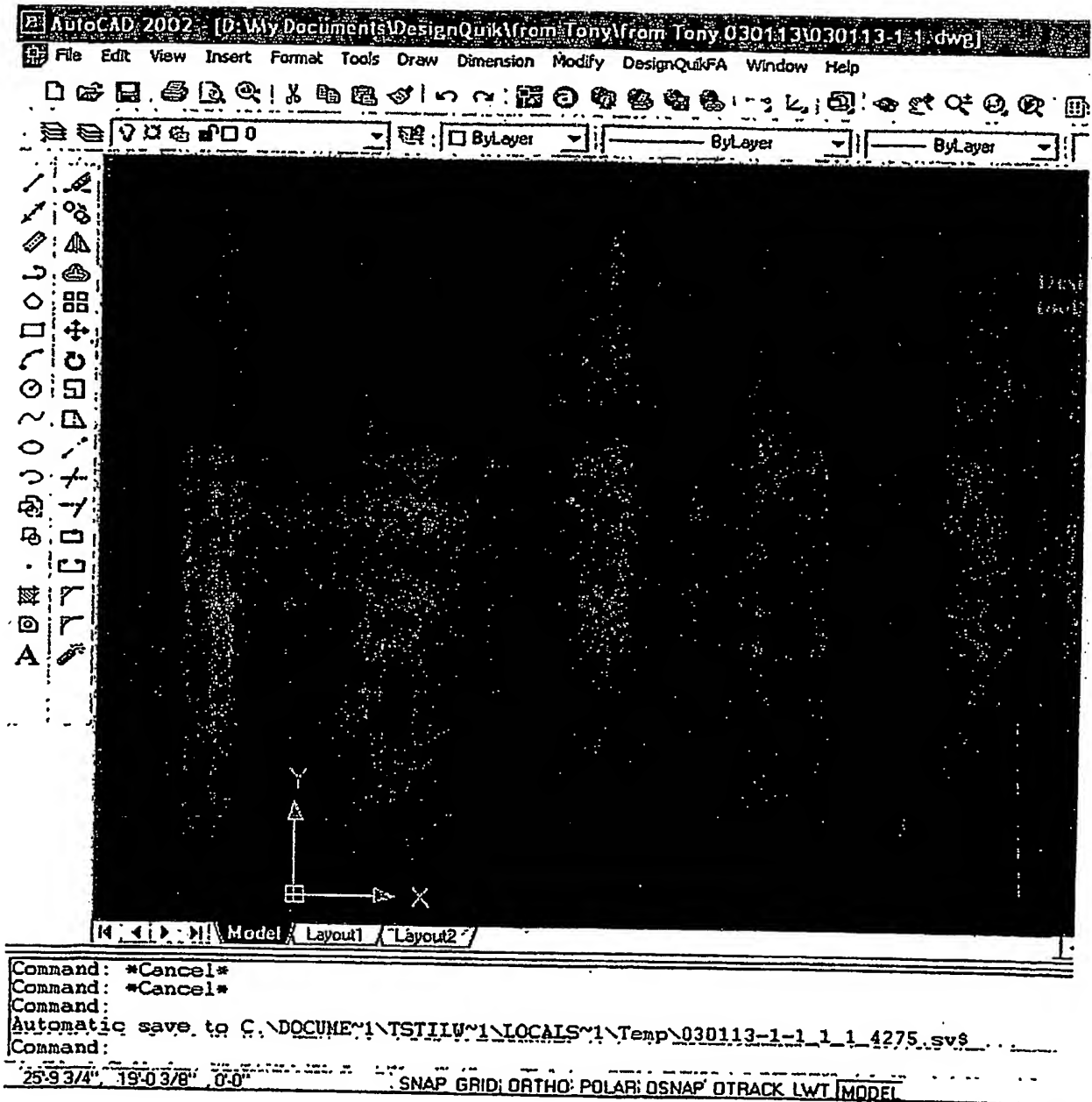
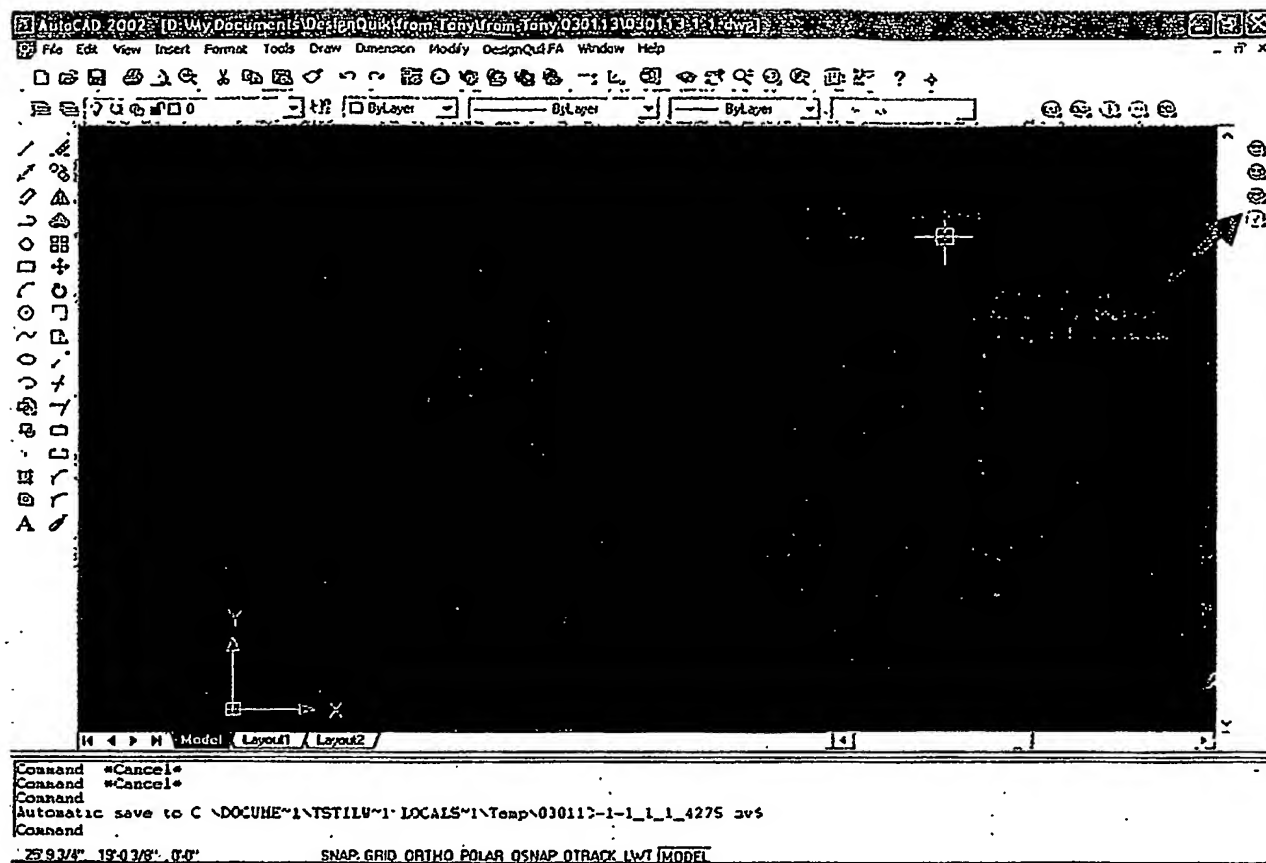


FIG. 37A



**FIG. 37B**

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To get started placing the fire alarm system on the floor plan, click on the **DesignQuik®** menu and select "Device Placement". A submenu will present the devices from the Project Device List for selection and placement. Alternatively, you may select from the toolbars on the right. (see next slide)

**FIG. 38**

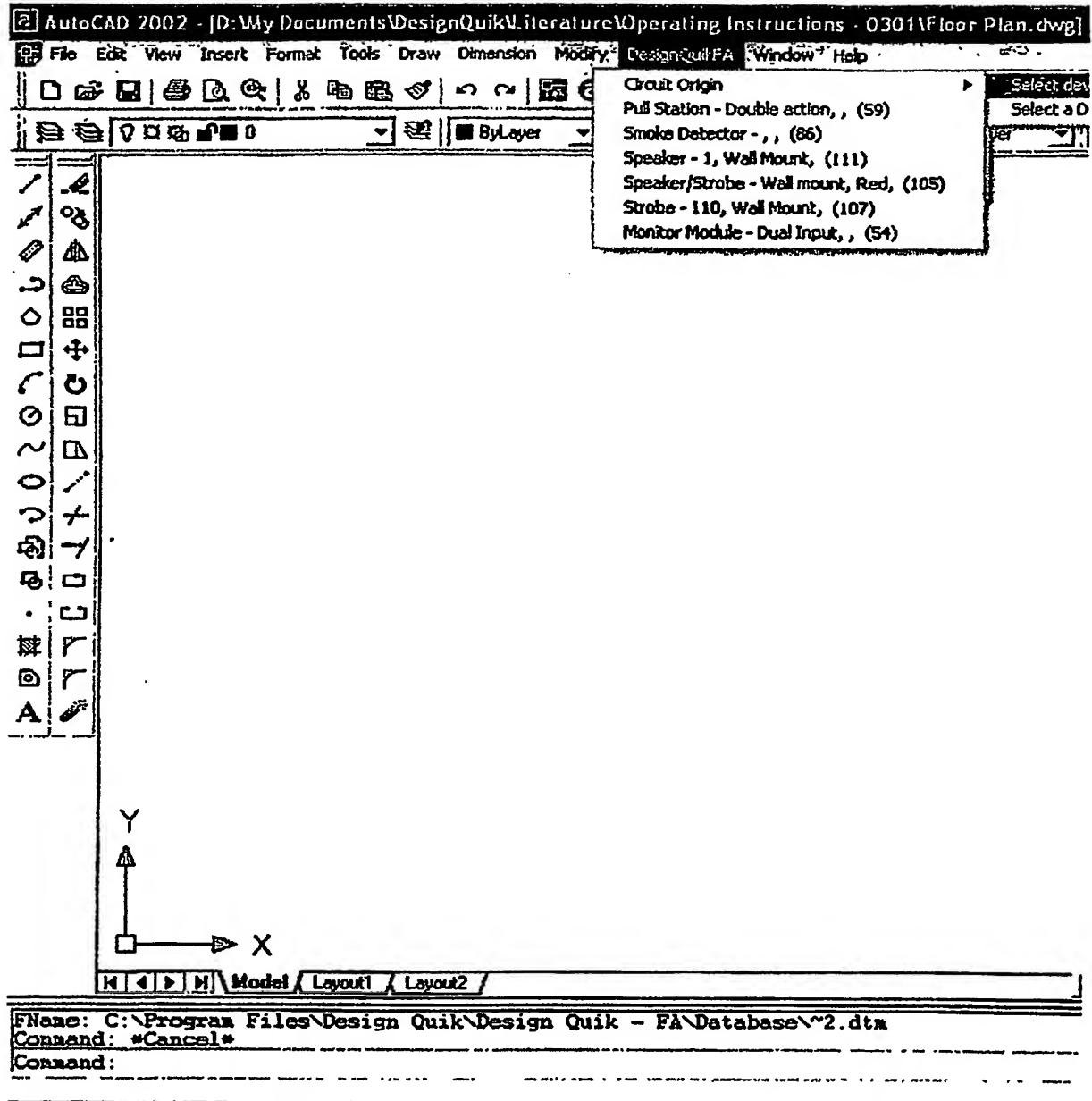
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FIG. 39A

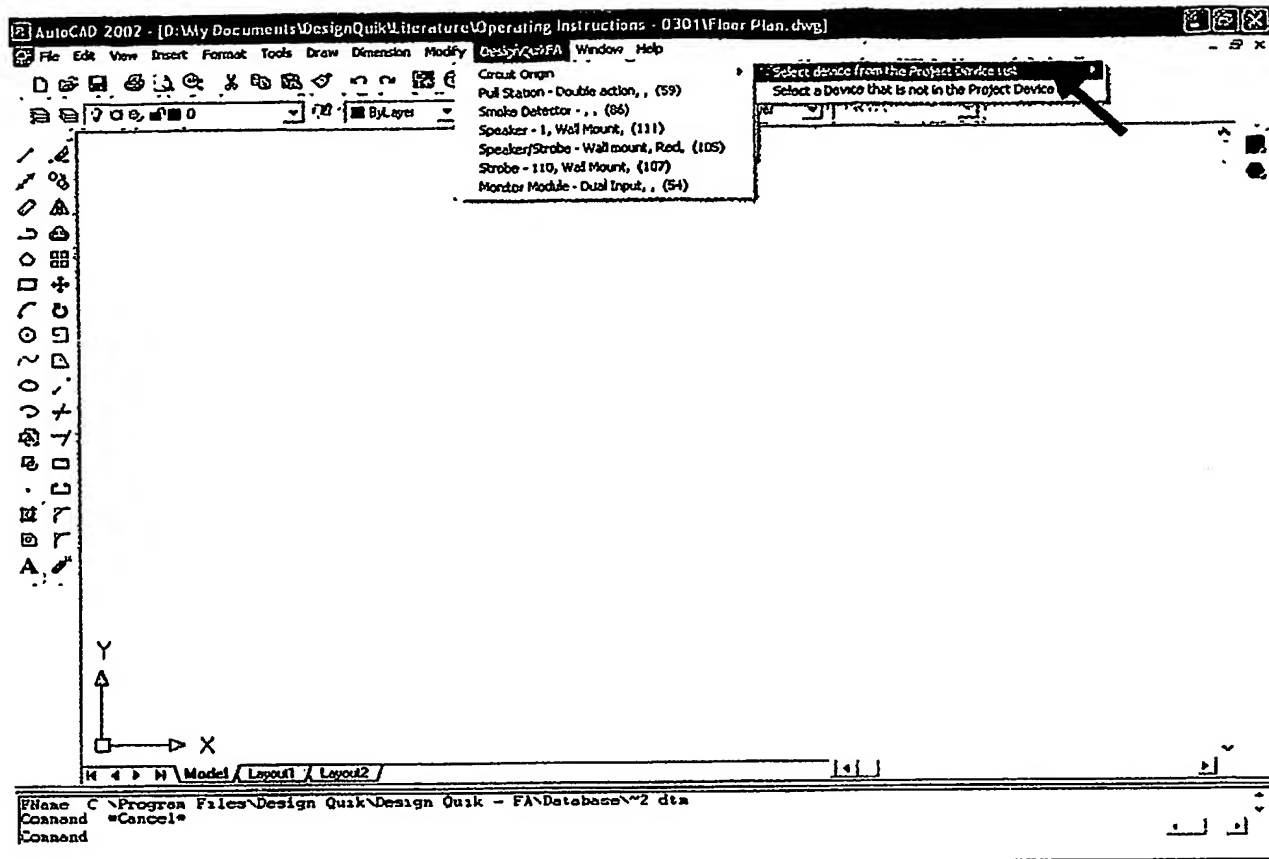


FIG. 39B

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The toolbars offer a quick, easy alternative to using the menu for selecting and placing items. Hold the mouse cursor over the toolbar and hold down the left mouse button to view the "slide out" toolbar buttons. While continuing to hold down the left mouse button, slide the mouse cursor over the individual toolbar buttons to view the specific devices for selection. Note that the tooltip text displays the device and certain useful characteristics for quick, accurate selection.

**FIG. 40**

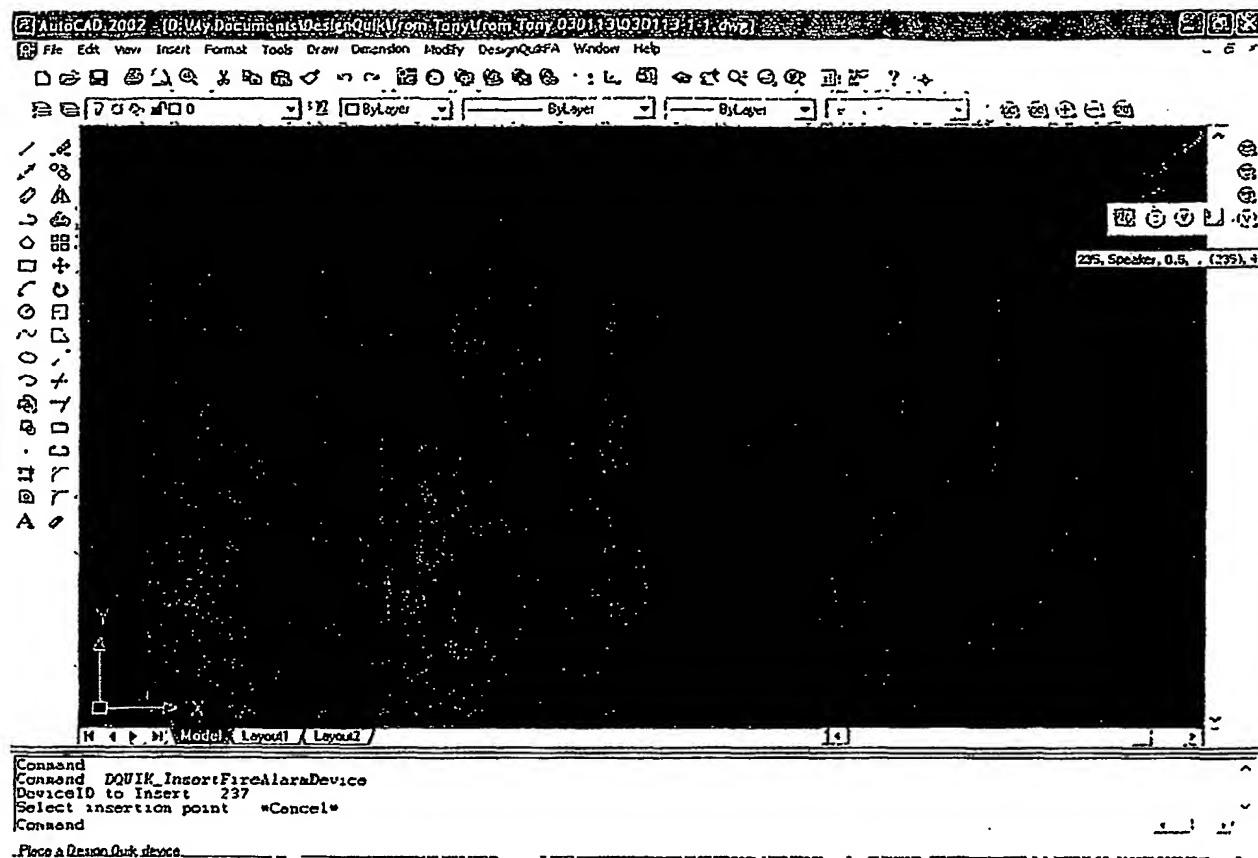


FIG. 41

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Select the first device, as prompted in the Command line. Connect devices must begin with a Circuit Origin or a previously connected device.

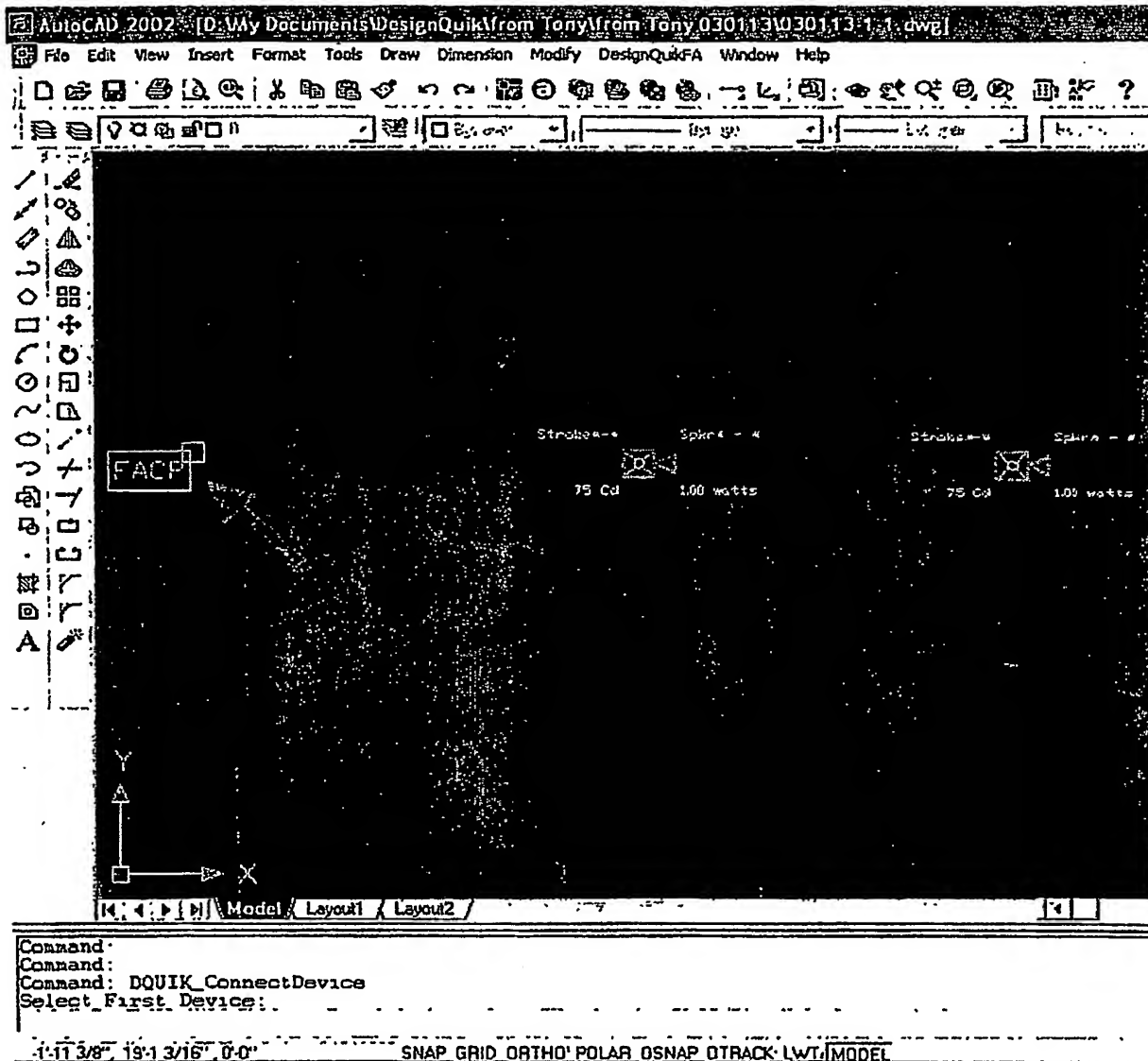
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FIG. 42A

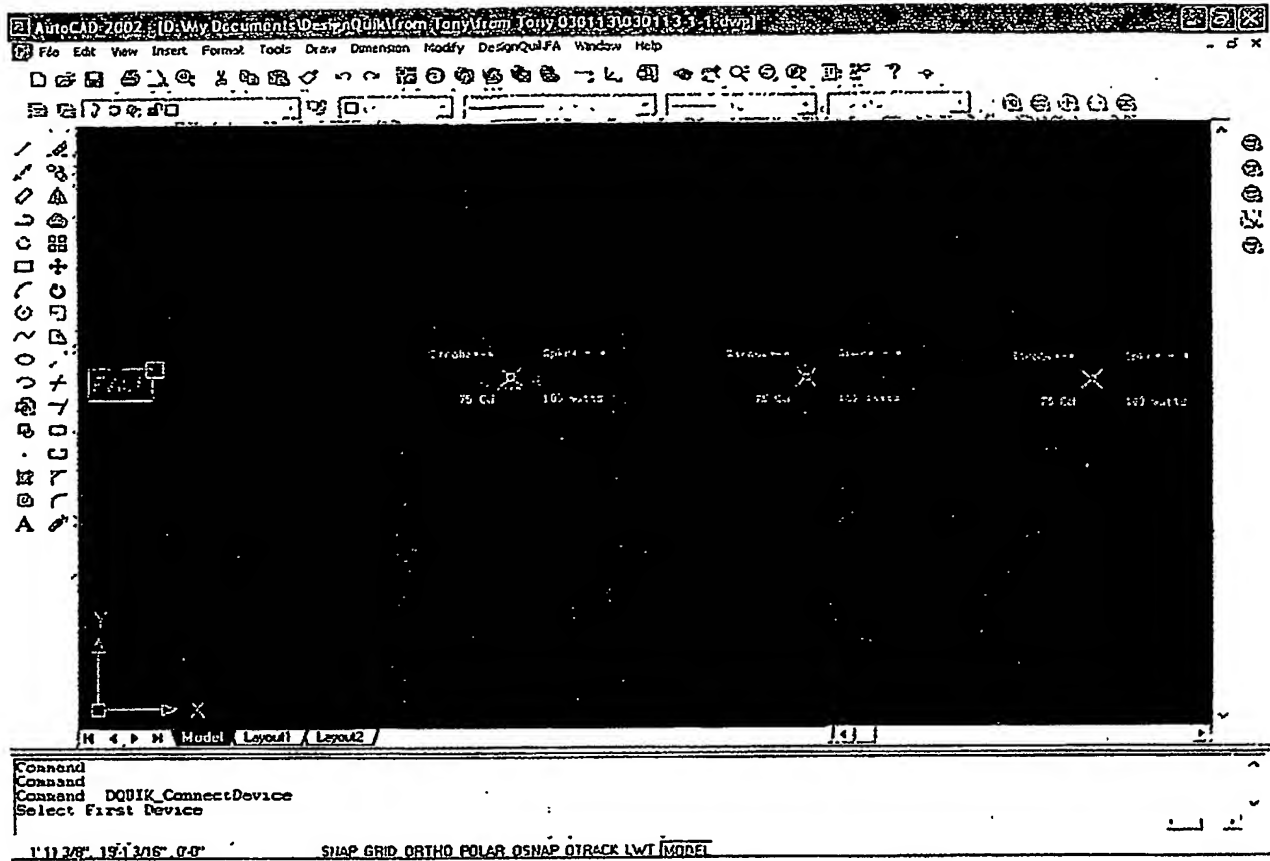


FIG. 42B

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A dialog box will appear to offer options for circuit shape. Since the first device is a speaker strobe, the software will automatically choose speaker and strobe circuits for connection to the device. Click OK to select a Curve shape wireway.

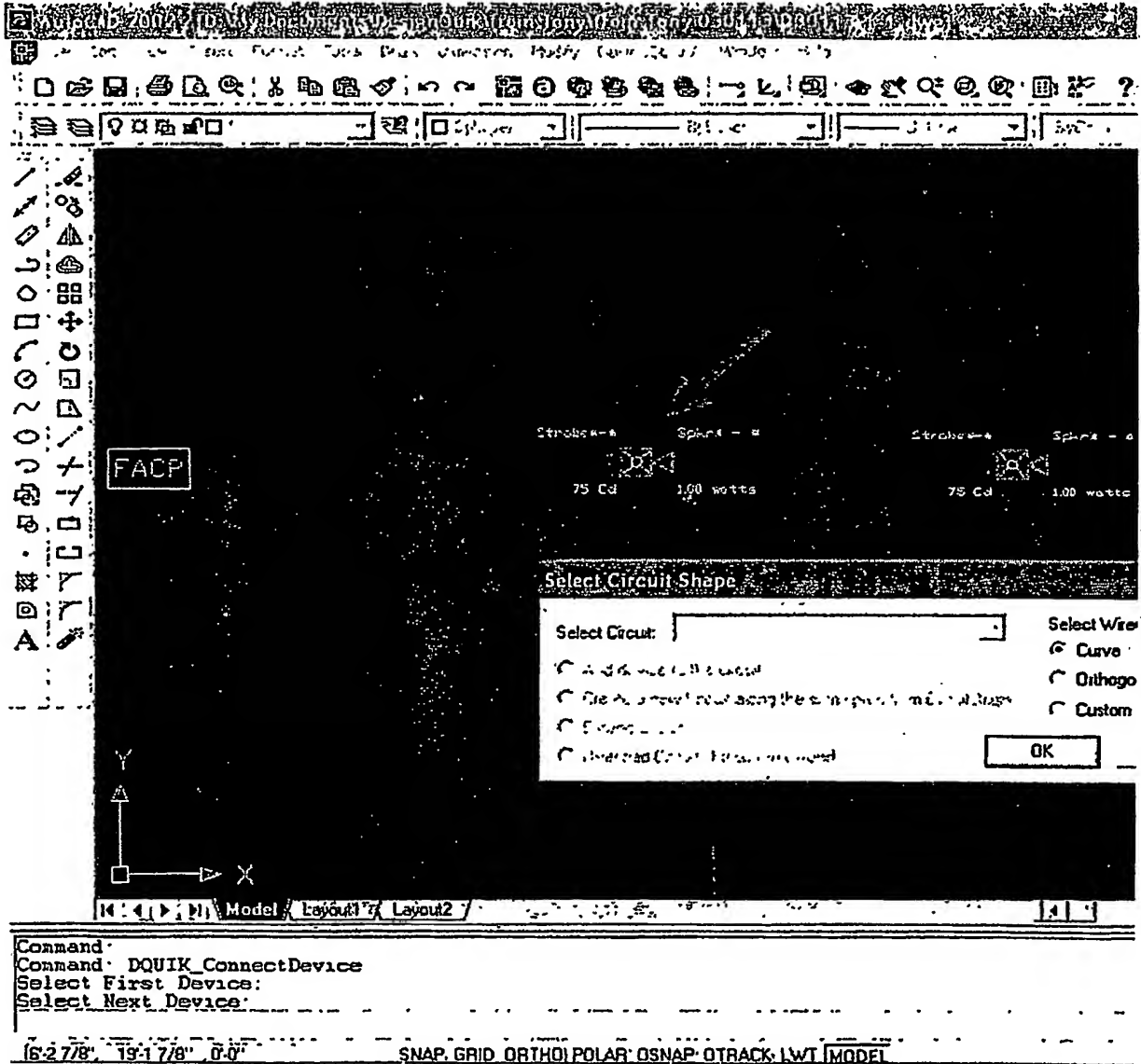


FIG. 43A

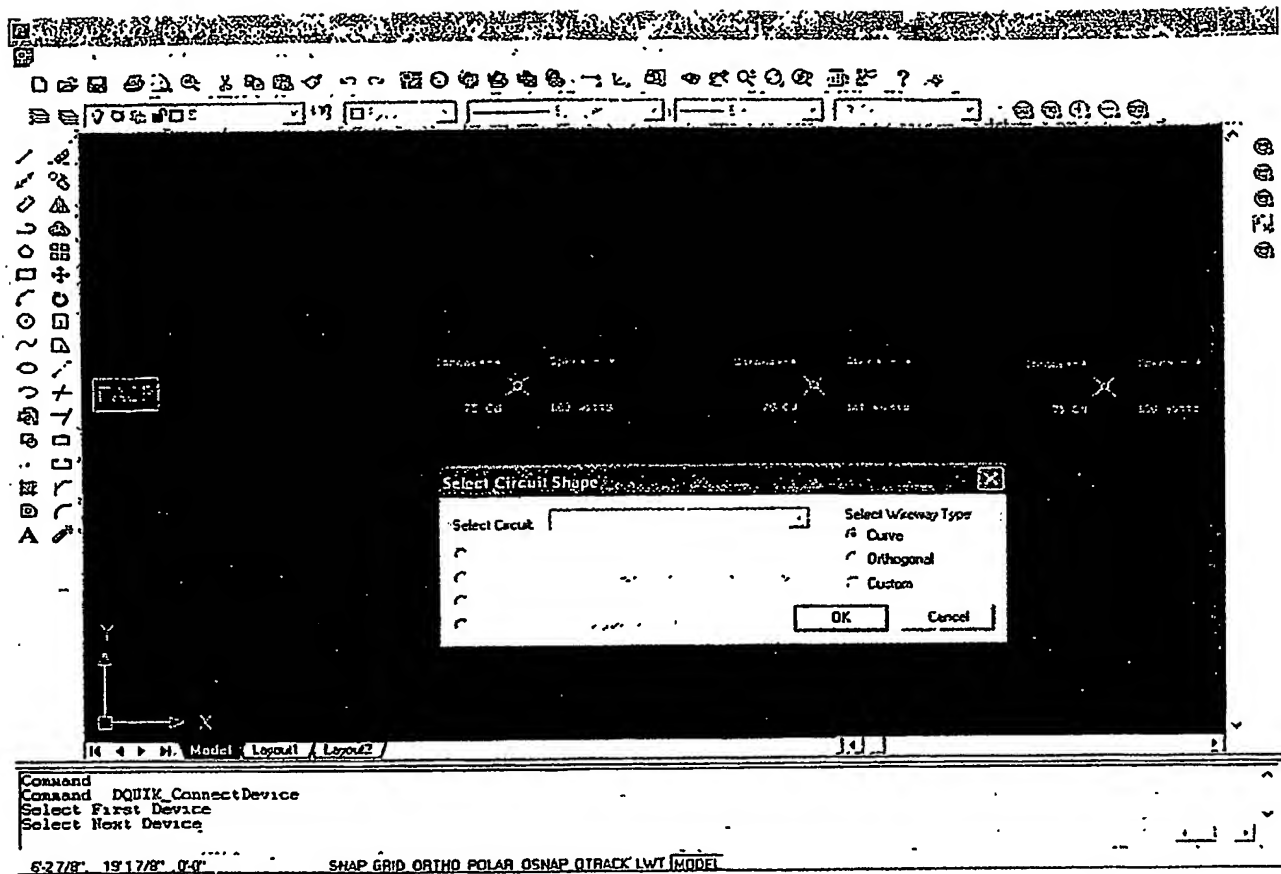
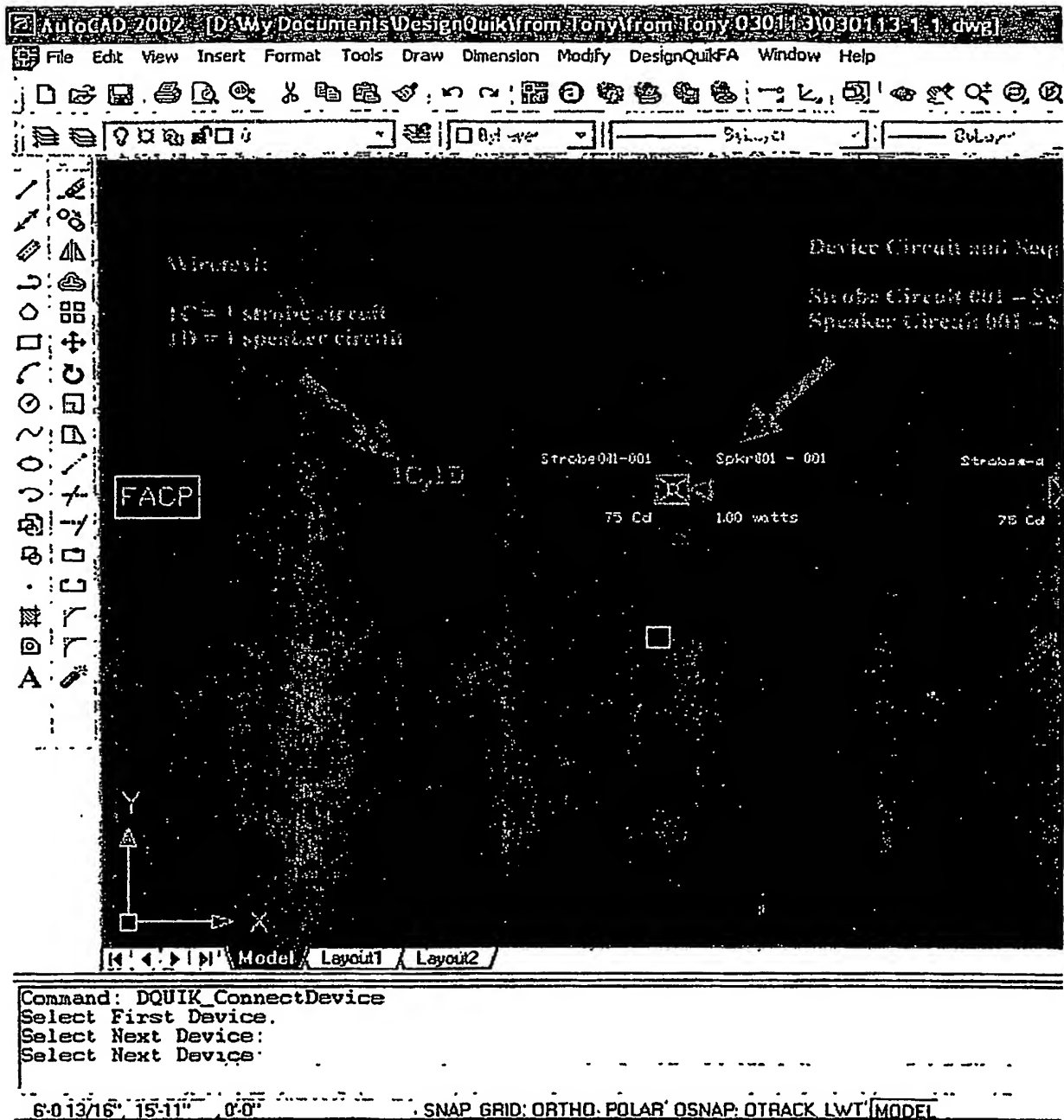


FIG. 43B

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A curve wireway connects the FACP to the first device. The Wiretext displays the circuits in the wireway. The device circuit and sequence numbers are displayed, for the strobe and the speaker. The speaker wattage and the strobe candela output are also displayed. In the command line, the user is prompted to select the next device for connection.

**FIG. 44**



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FIG. 45A

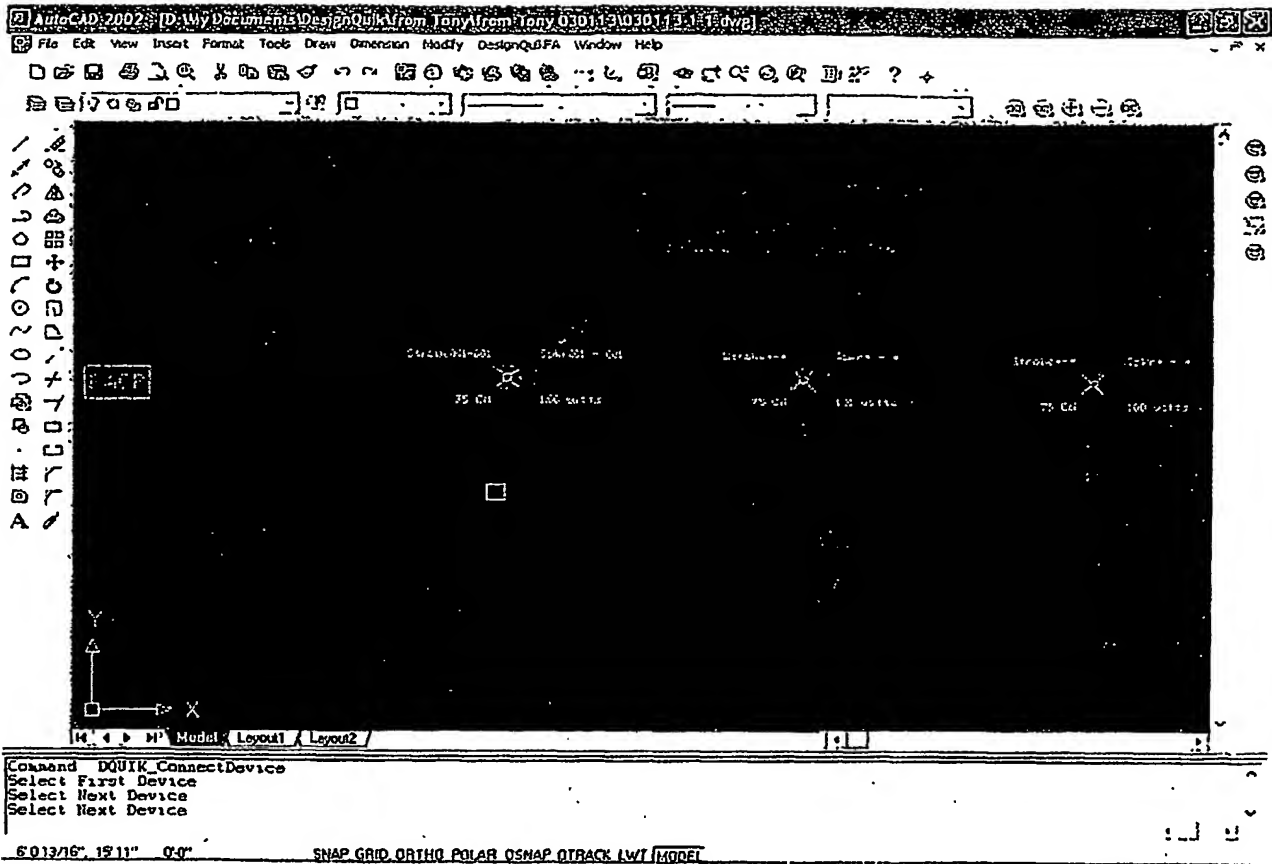
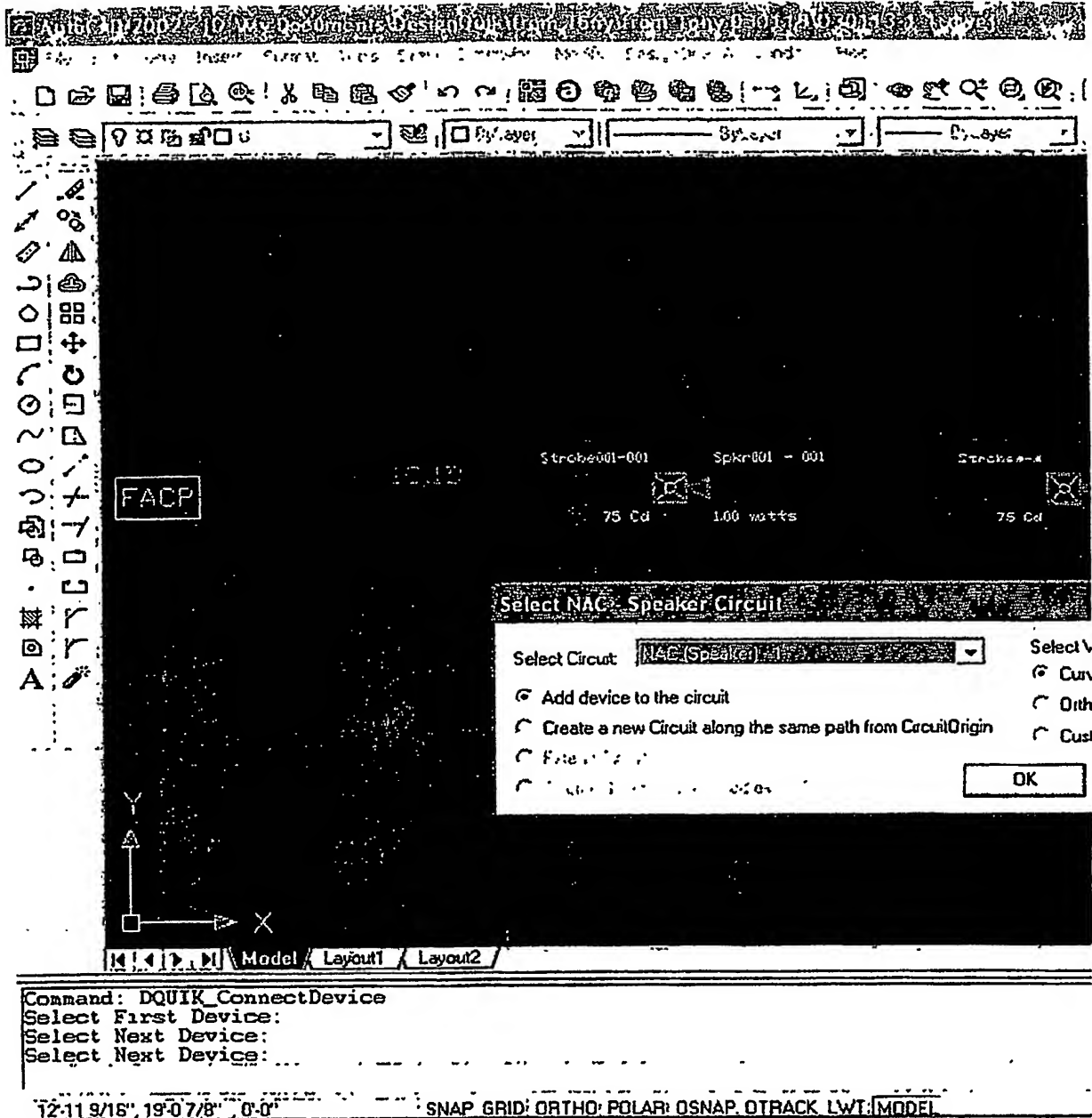


FIG. 45B

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When the second device is selected for connection, the dialog box appears again. By selection of the proper radio button, the user is allowed to either connect the next speaker to the same circuit, or to "pull" a new circuit from the FACP (Circuit Origin) to the second device. For this example, choose "Add device to the circuit". Also, a curve wireway shape will be selected.

**FIG. 46**



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FIG. 47A

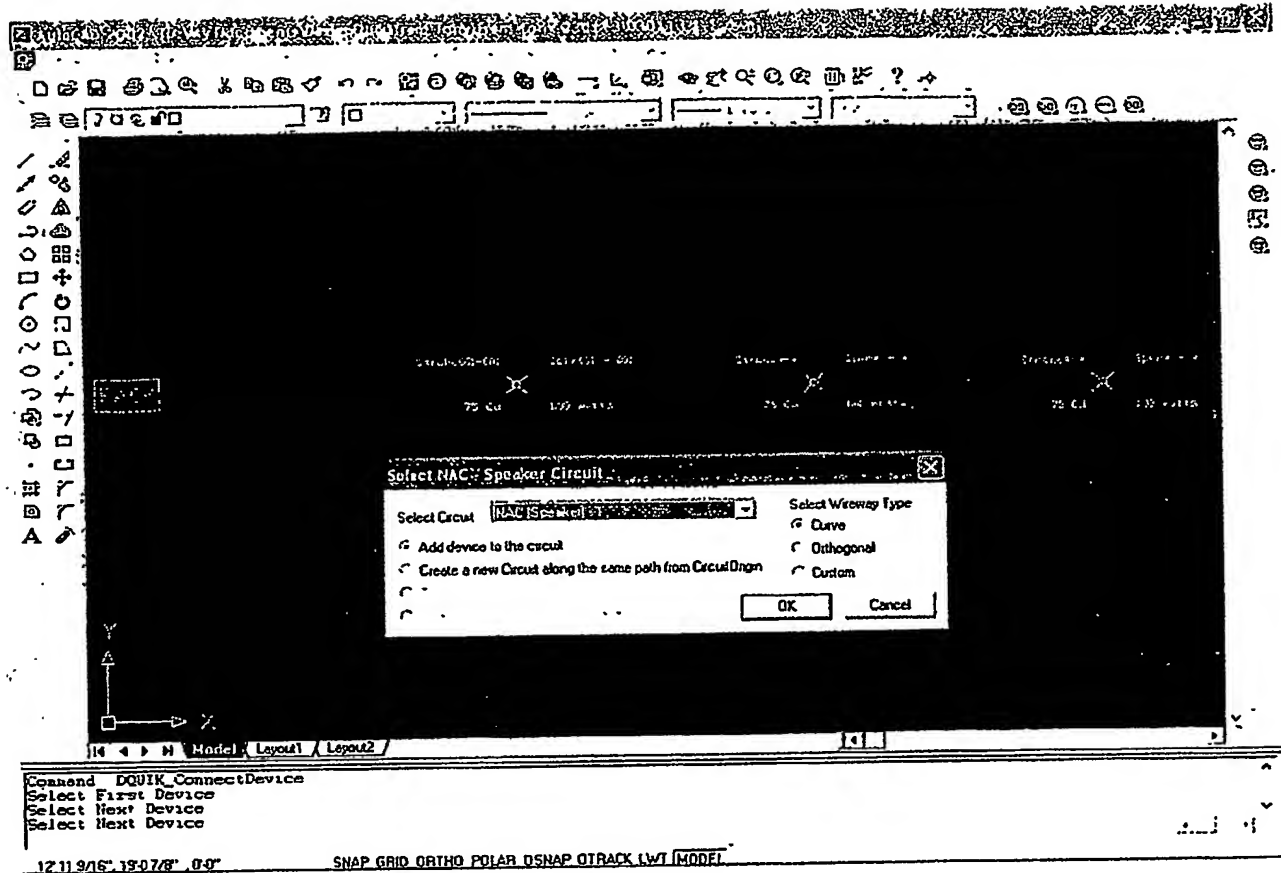


FIG. 47B

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Once the speaker circuit is selected, another dialog box is used to select the connection of the strobe. If OK is clicked now, a new strobe circuit will be created through the same wireway as Speaker Circuit 001.

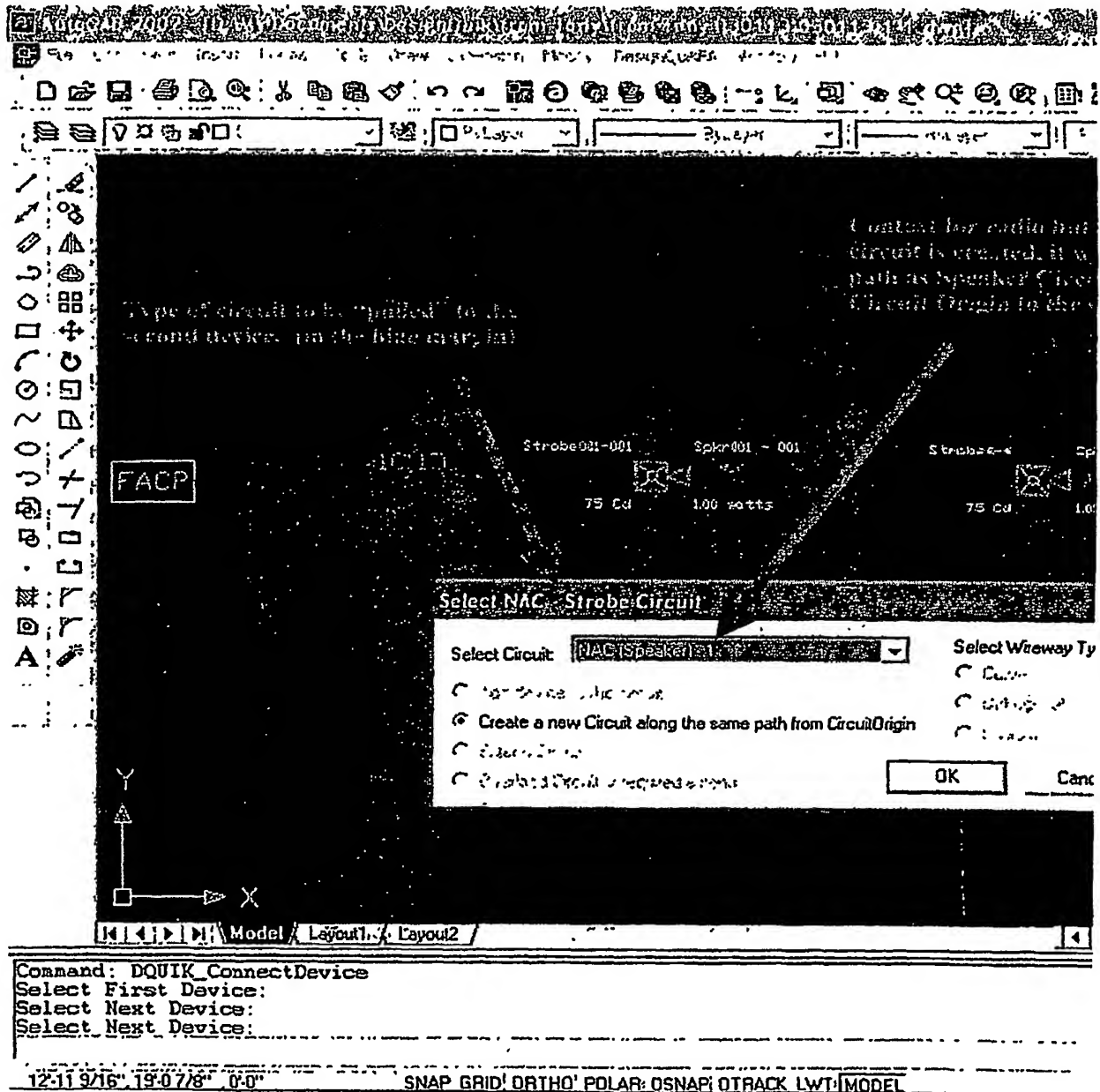


FIG. 48A

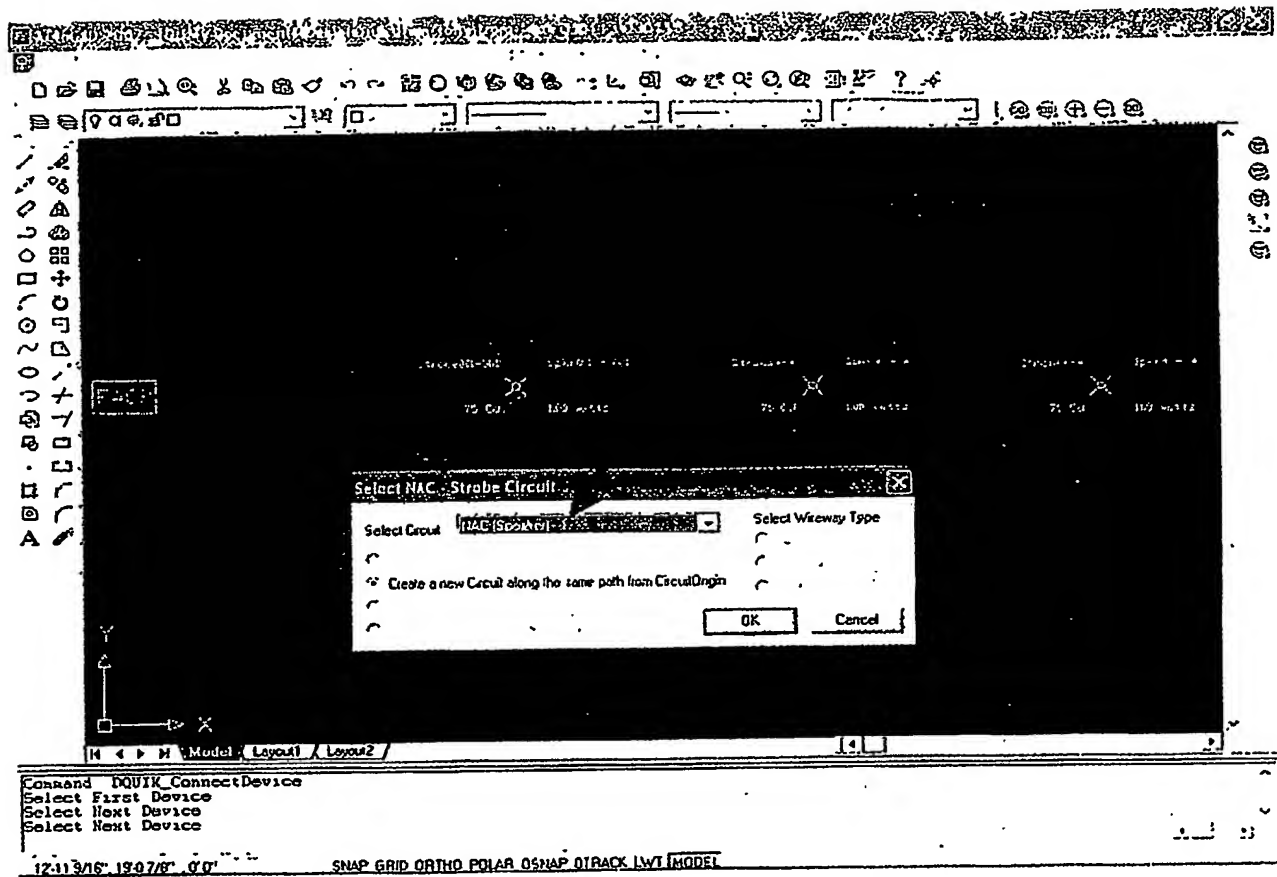


FIG. 48B

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Now change the context for the radio buttons, to see other options. Use the pull-down text box and select Strobe Circuit 1 as shown.

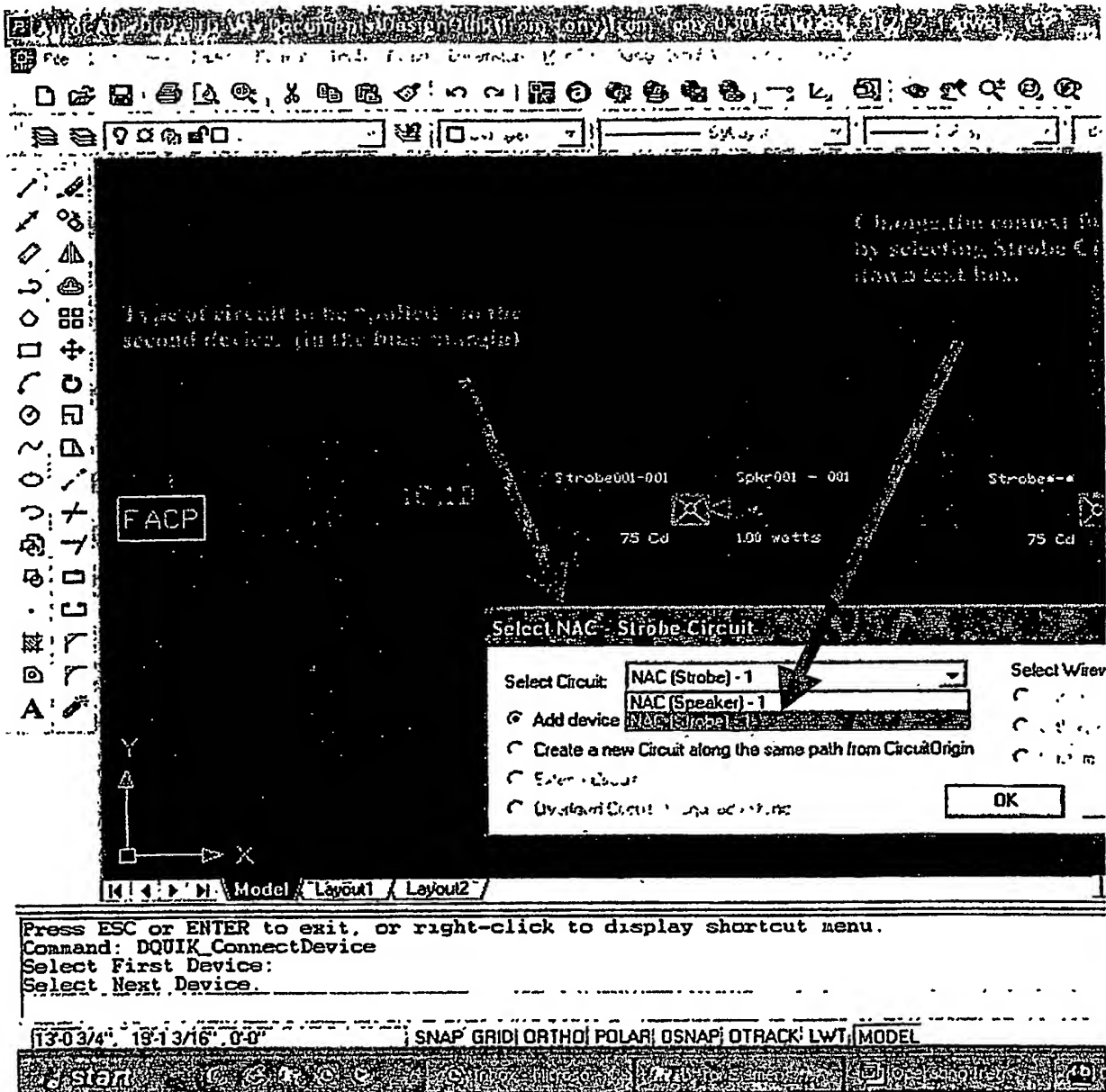


FIG. 49A

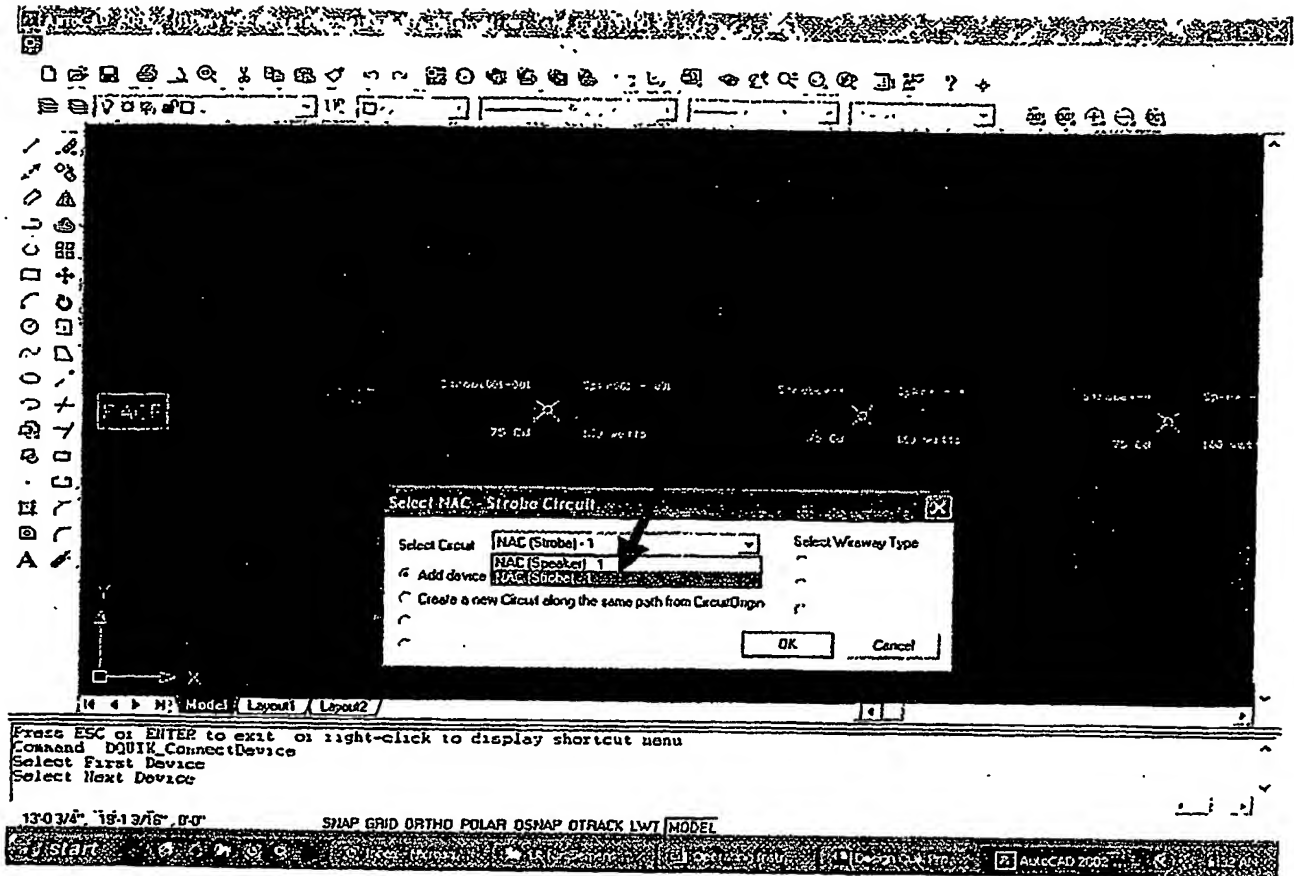


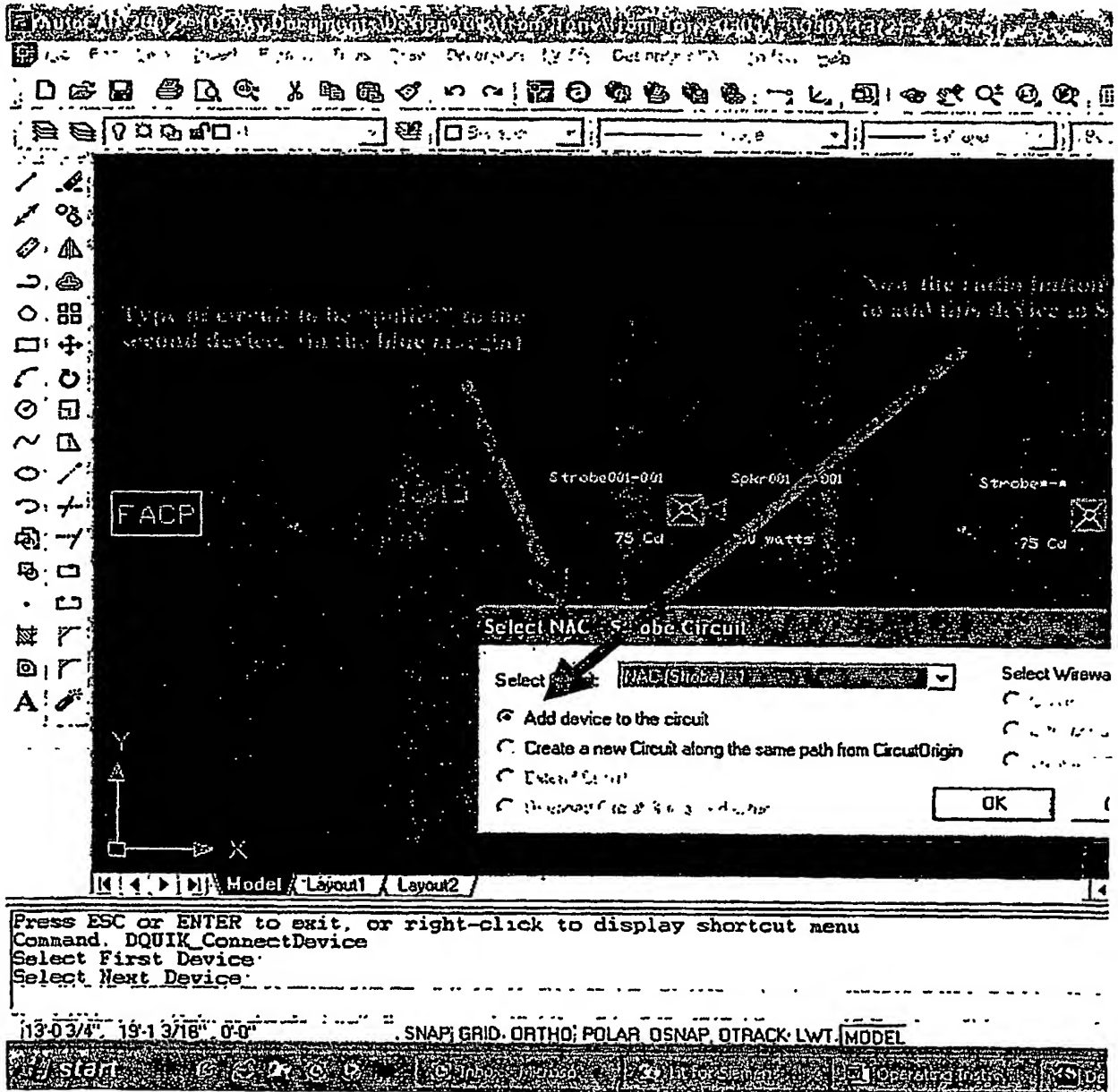
FIG. 49B

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The radio buttons now include a choice to add the second device to Strobe Circuit 1.



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FIG. 50A

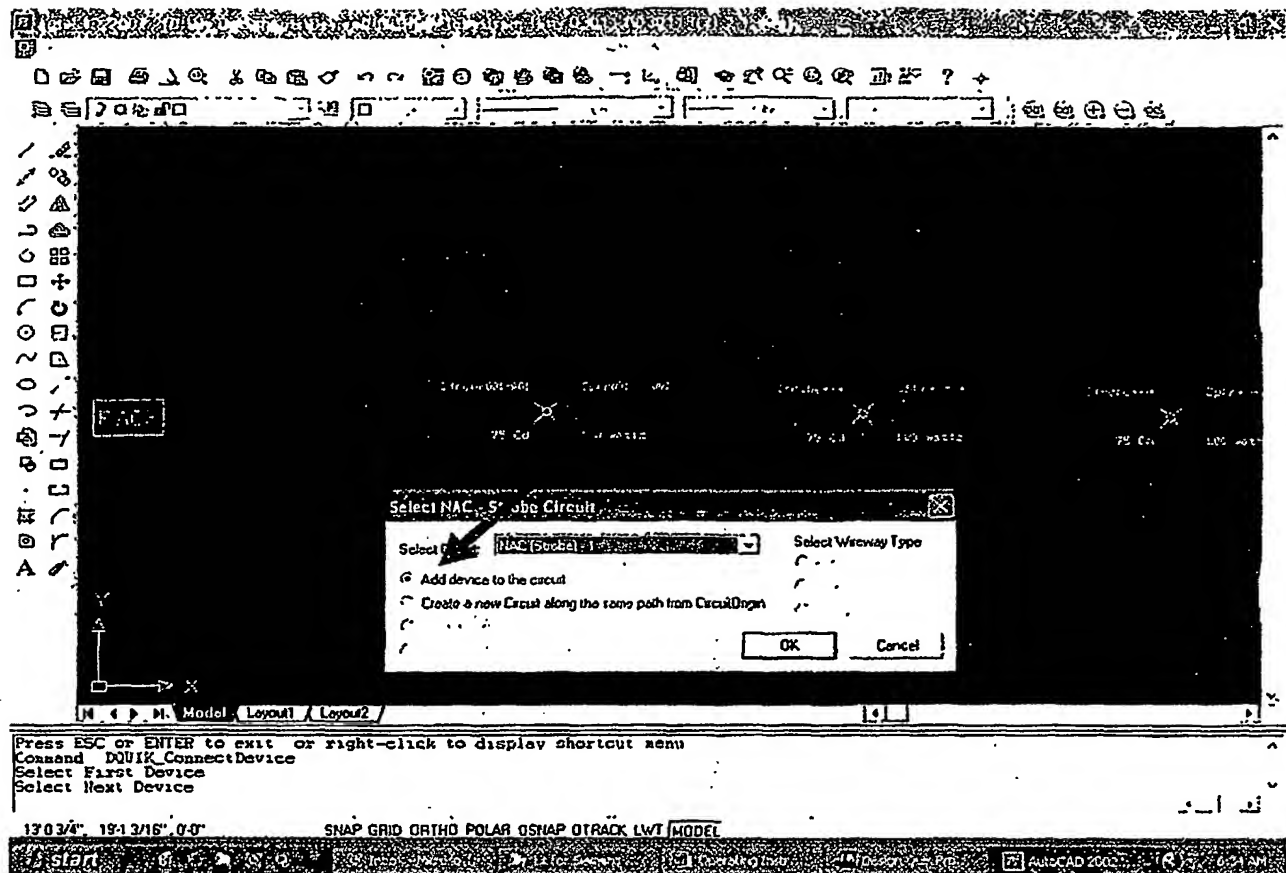


FIG. 50B

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The strobe and speaker circuit connection methods are now complete, so the connection is made. The Command Line prompts the user to continue by selecting another device for connection. At any time, the user can cancel the Connect Devices command by right click of the mouse or with the <Escape> key.

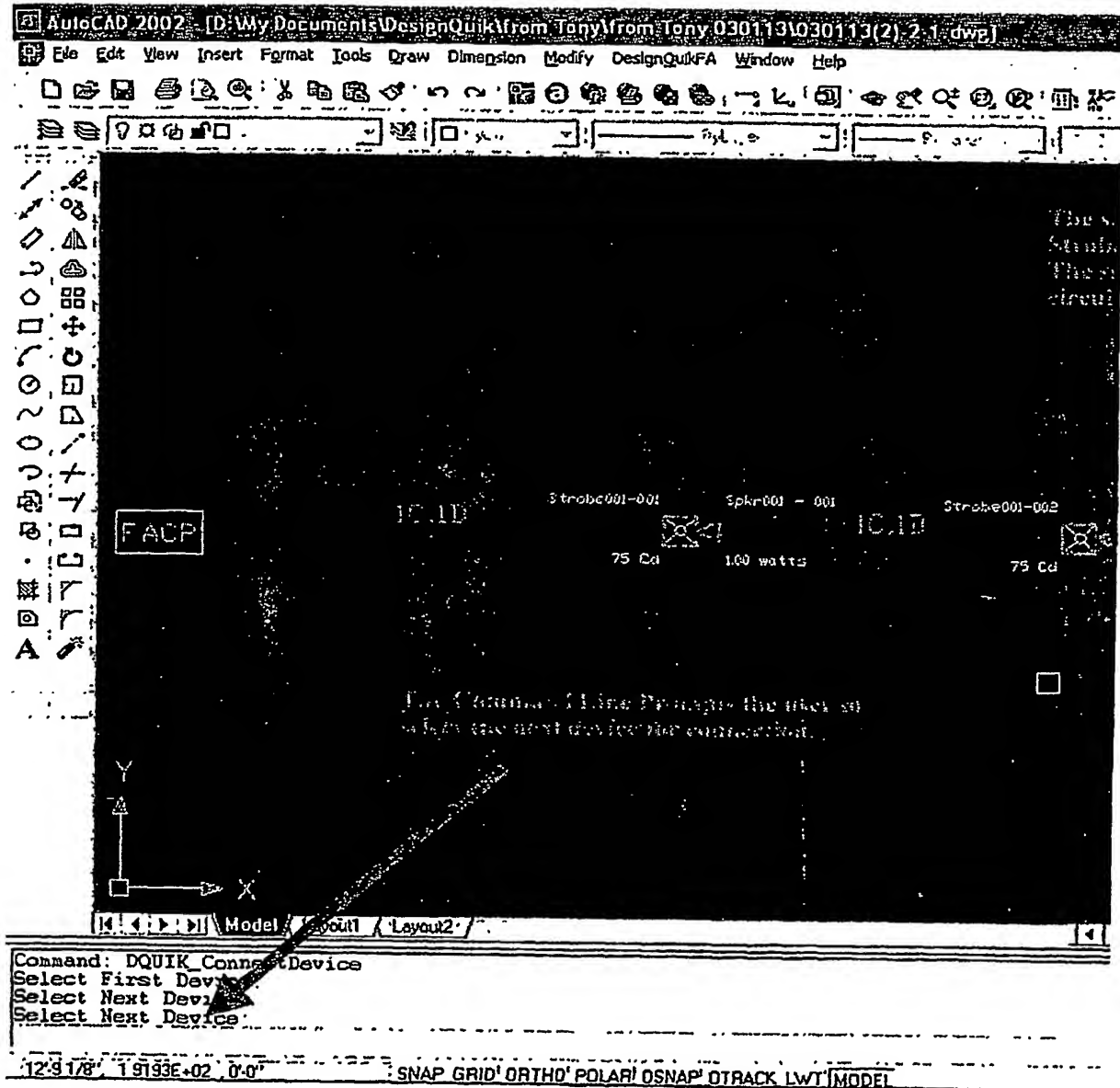


FIG. 51A

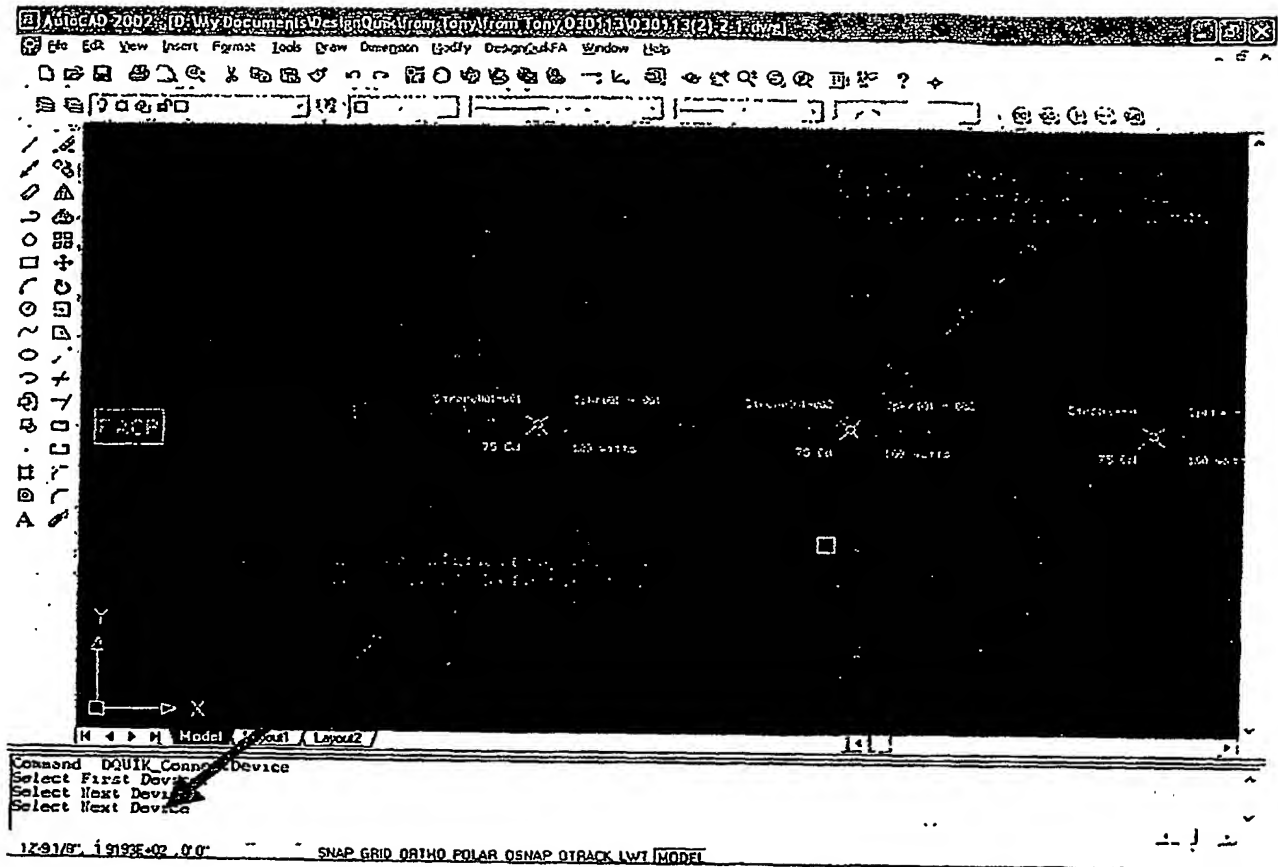
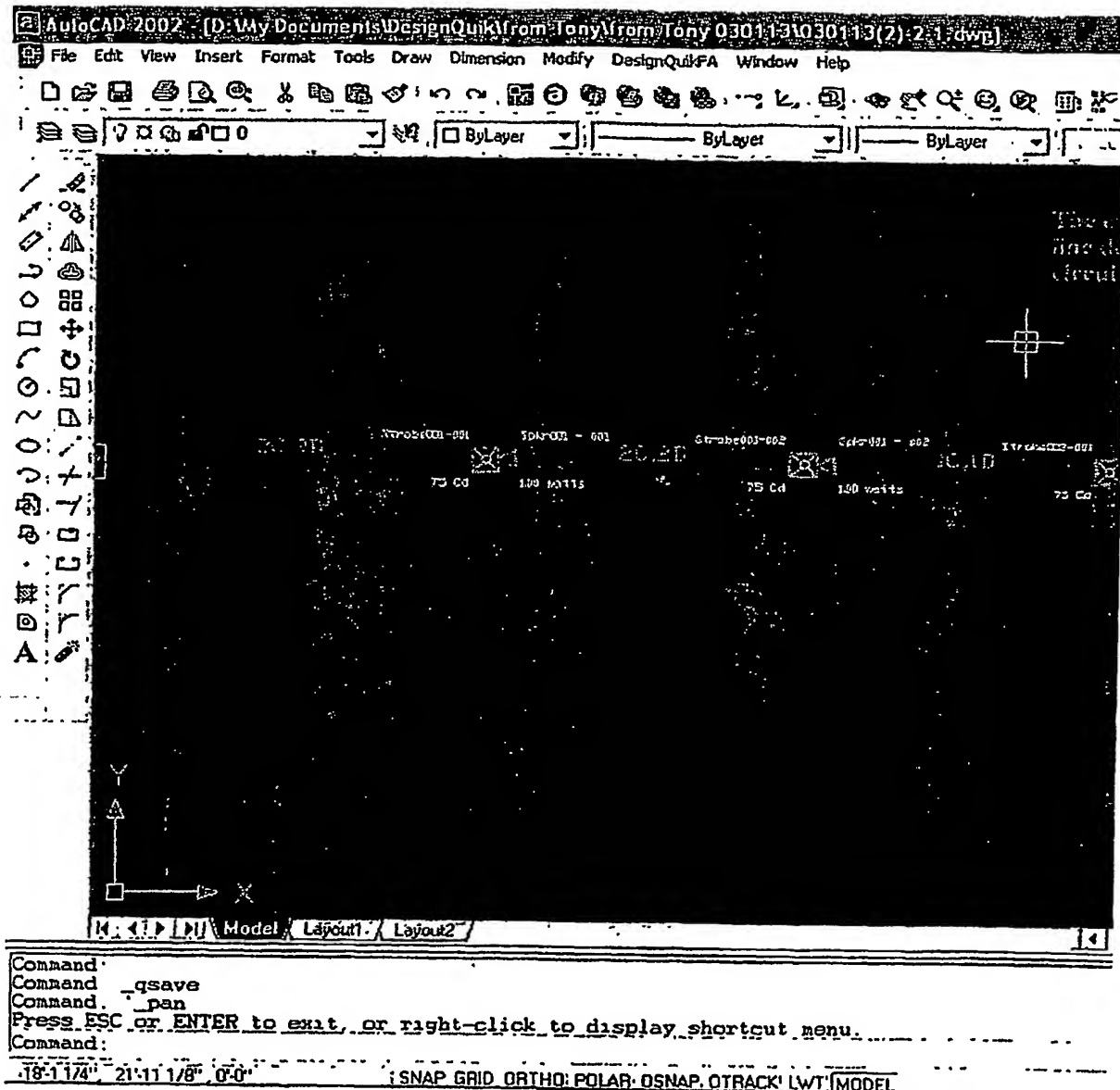


FIG. 51B

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The entire circuit of devices may be connected without exiting the Connect Devices command. Alternatively, the command may be canceled after connection of any device, then the Connect Devices command can be re-entered, and connection resumed by clicking on the LAST CONNECTED device, then the next FREE DEVICE, etc.



**FIG. 52A**

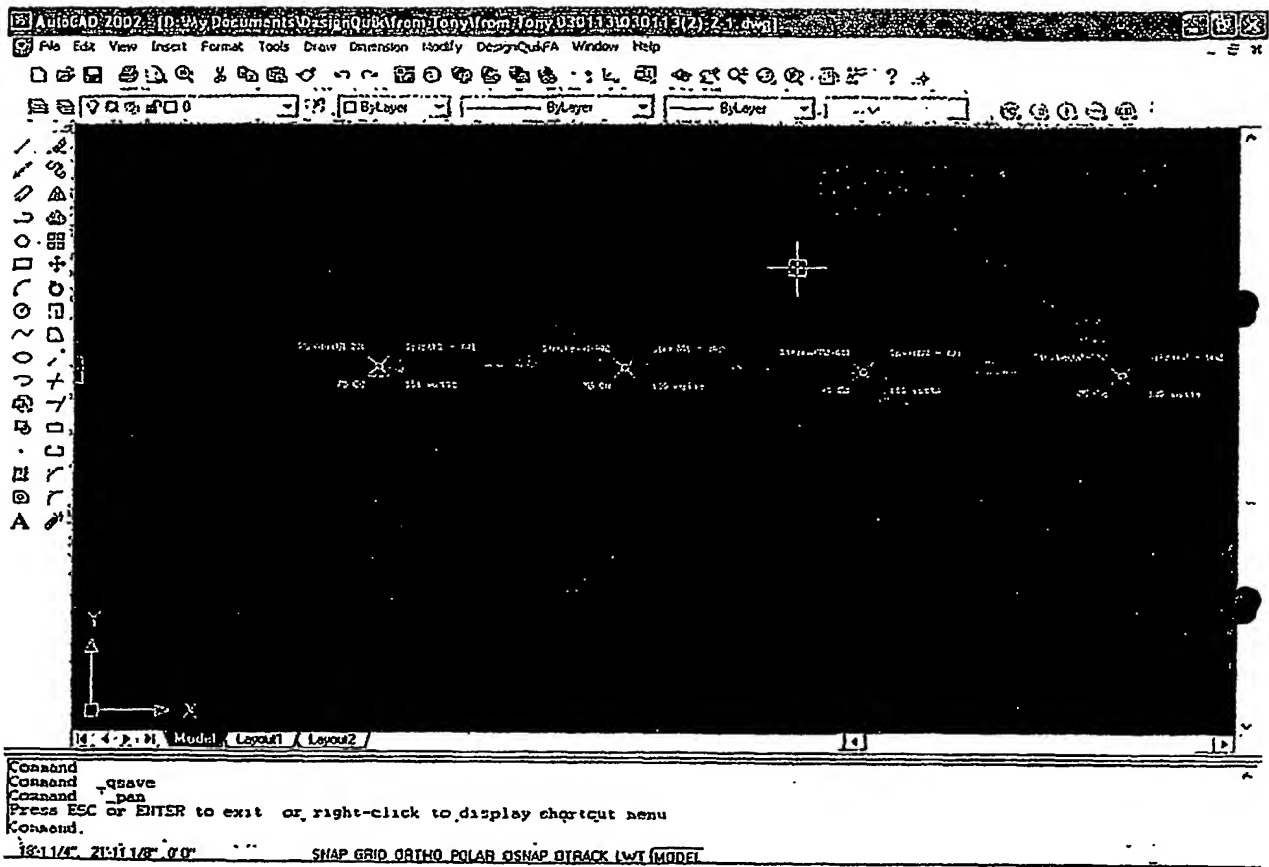


FIG. 52B

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Now to include an addressable smoke detector in the system. The software automatically will choose a Signaling Line Circuit (SLC) for connecting this device. The user has the option of routing the SLC directly from the FACP in its own wireway, or through the existing wireway. For this example, the SLC will be routed through the existing wireway.

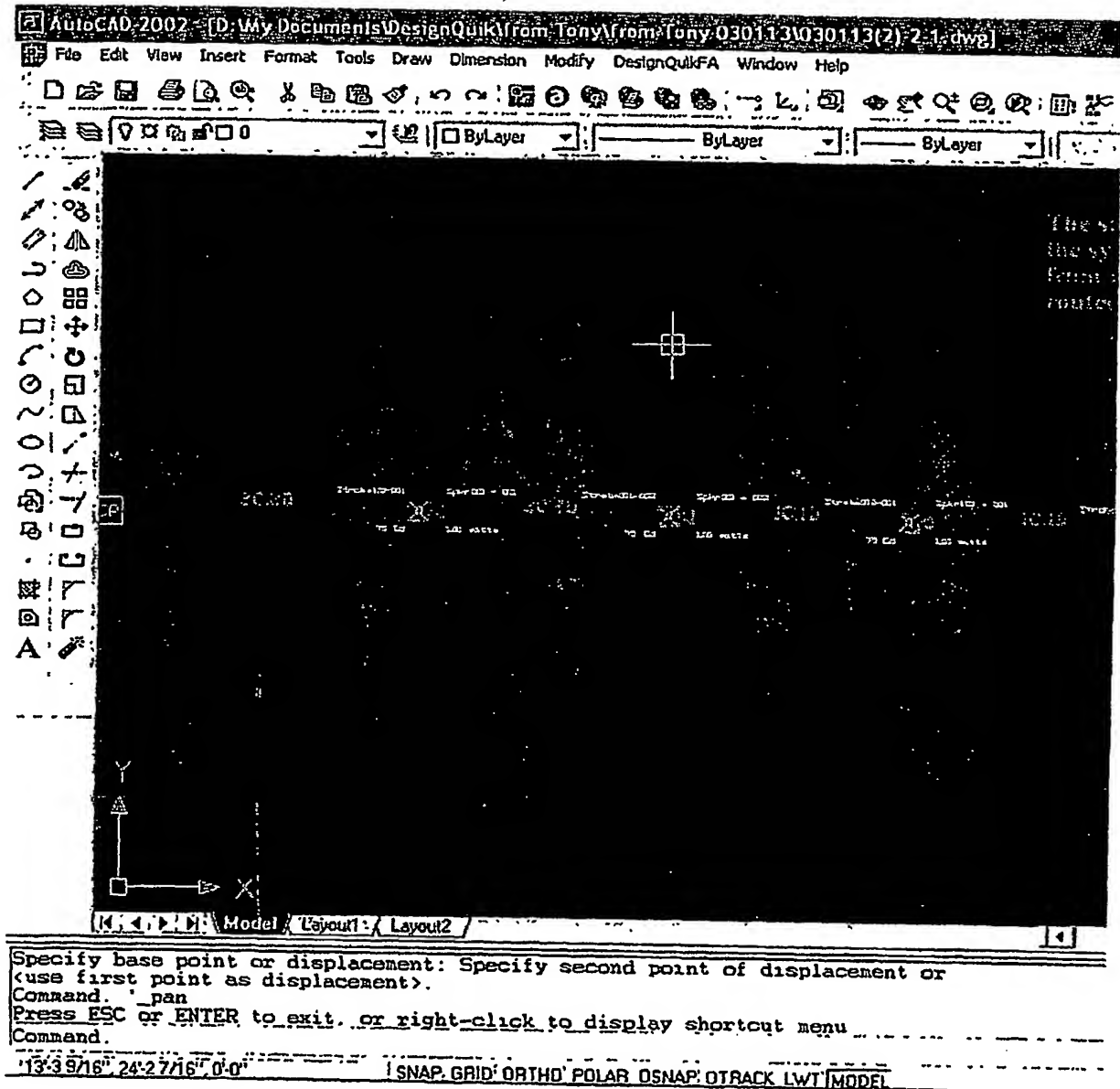


FIG. 53A

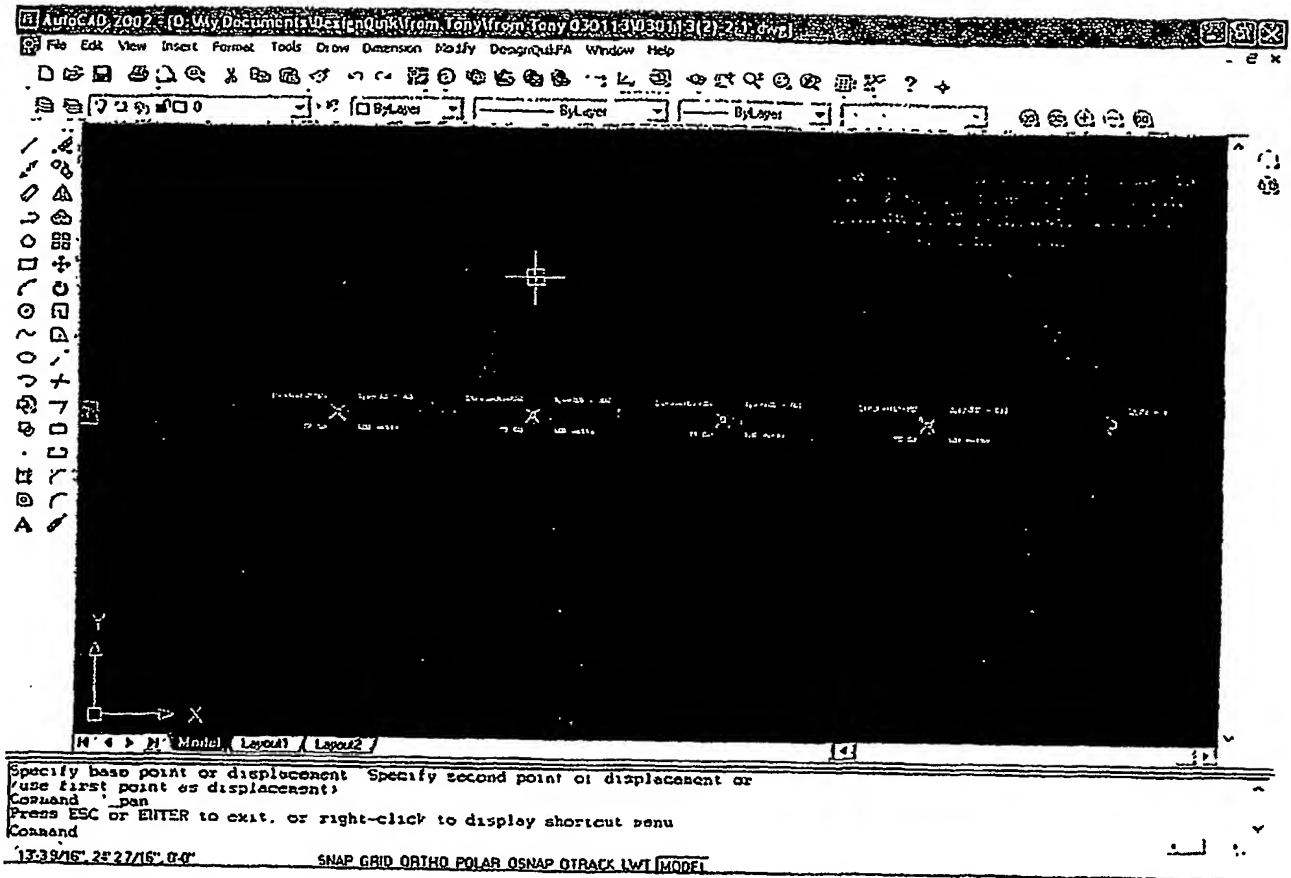


FIG. 53B

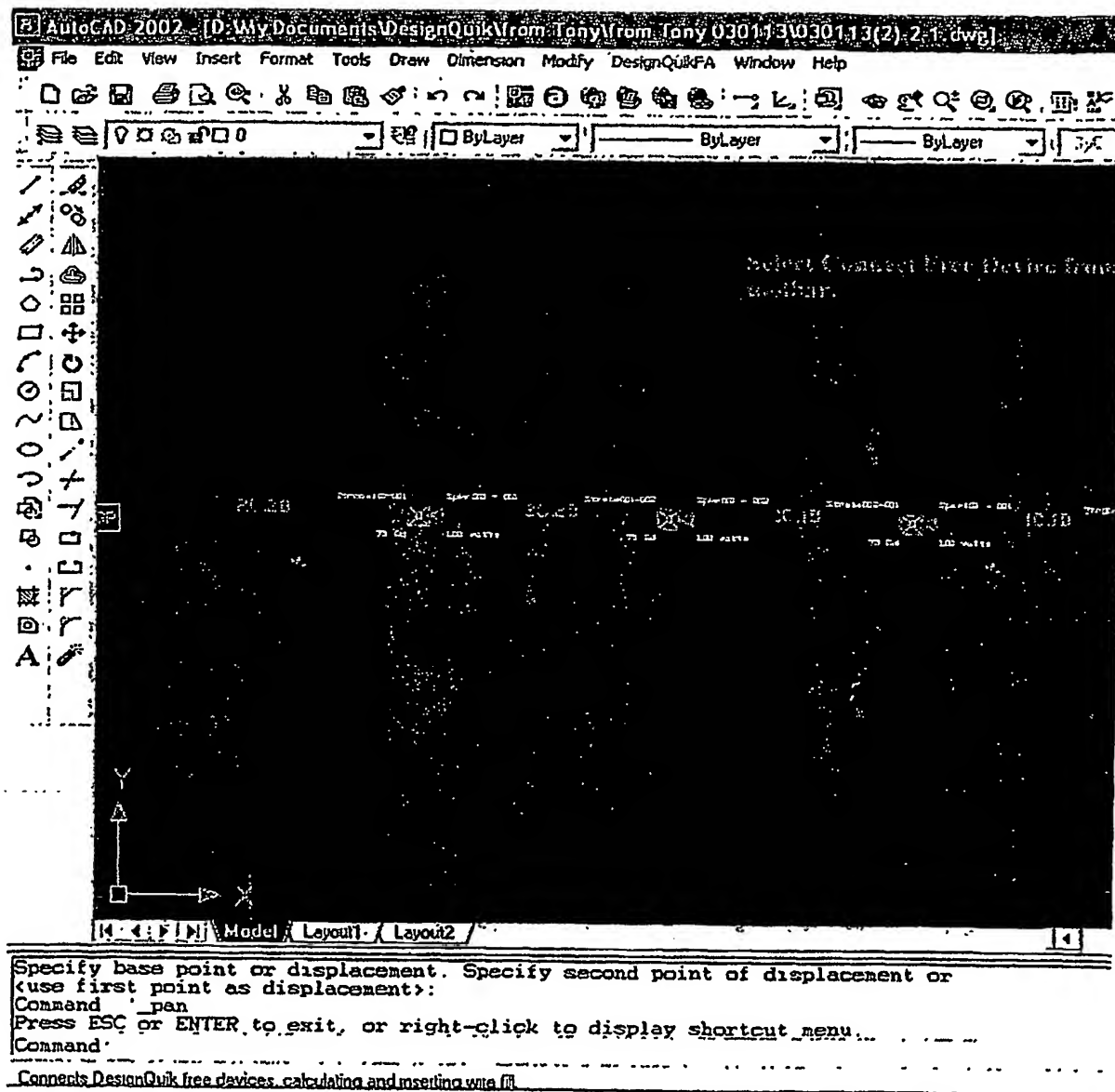
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FIG. 54A

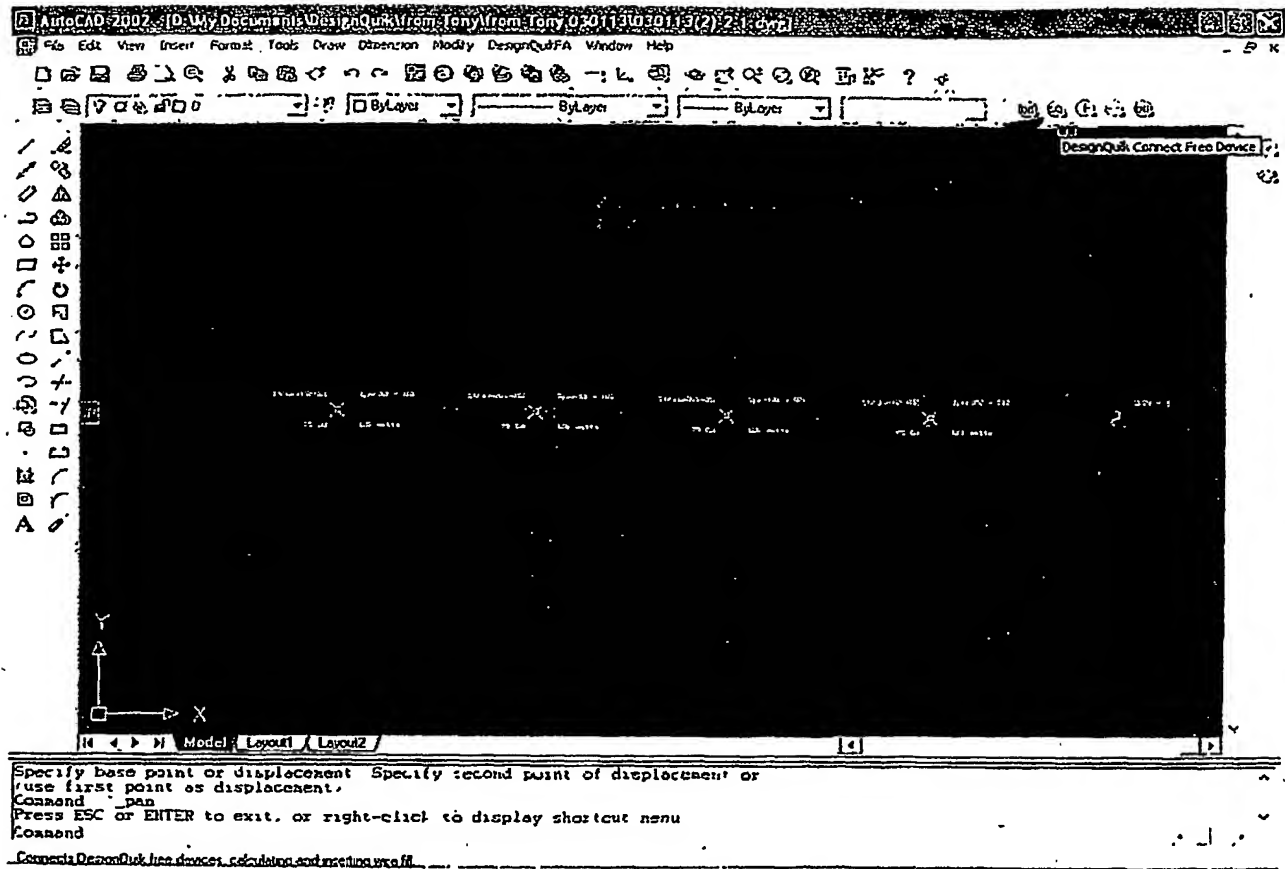
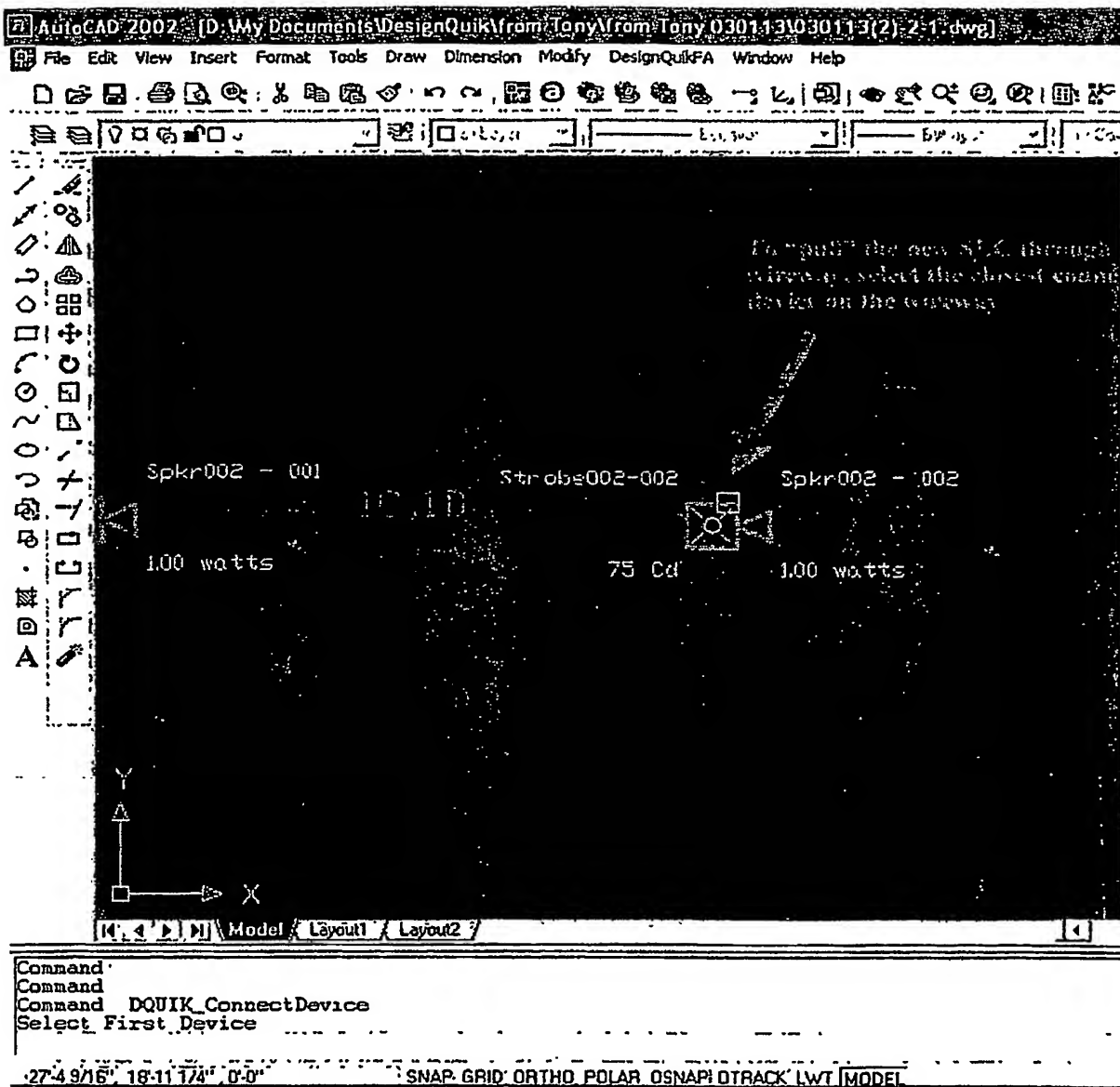


FIG. 54B

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FIG. 55A

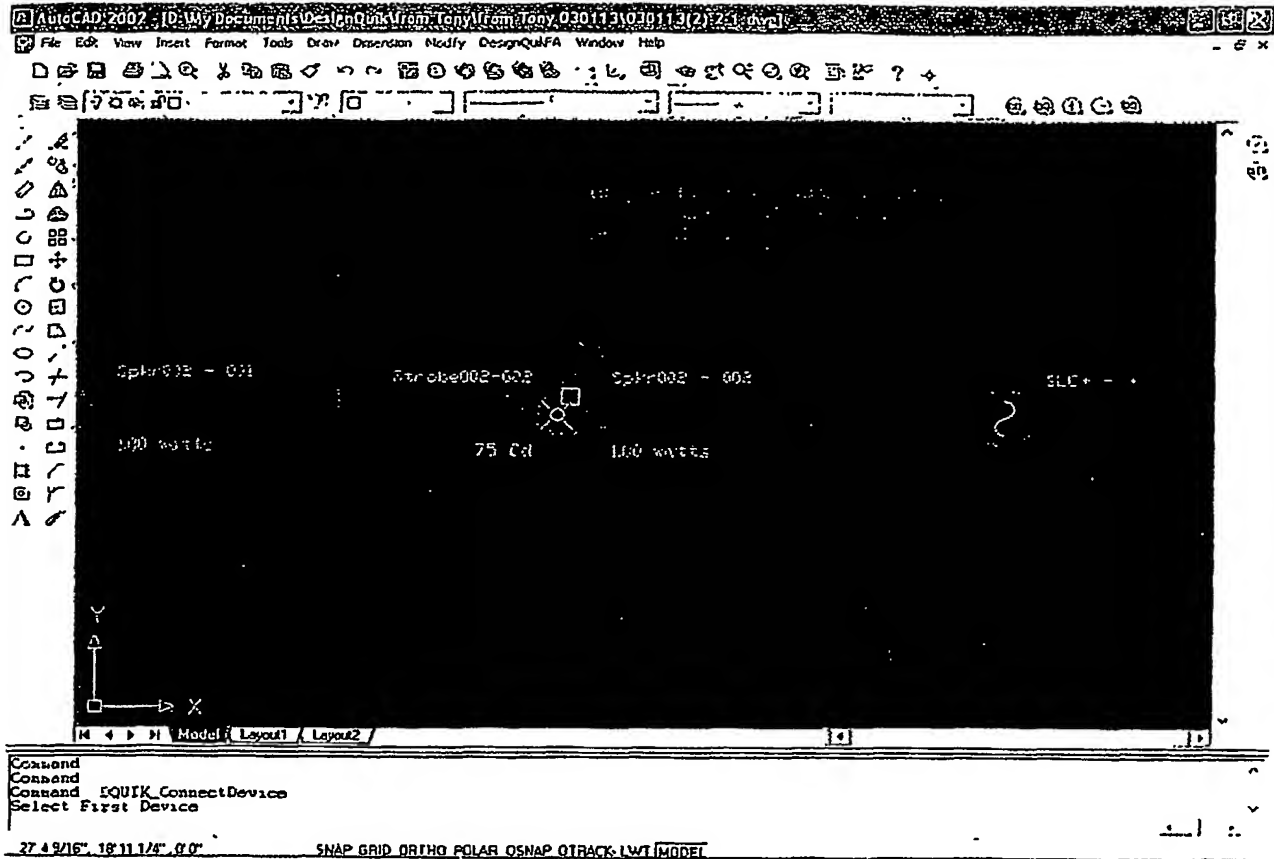


FIG. 55B

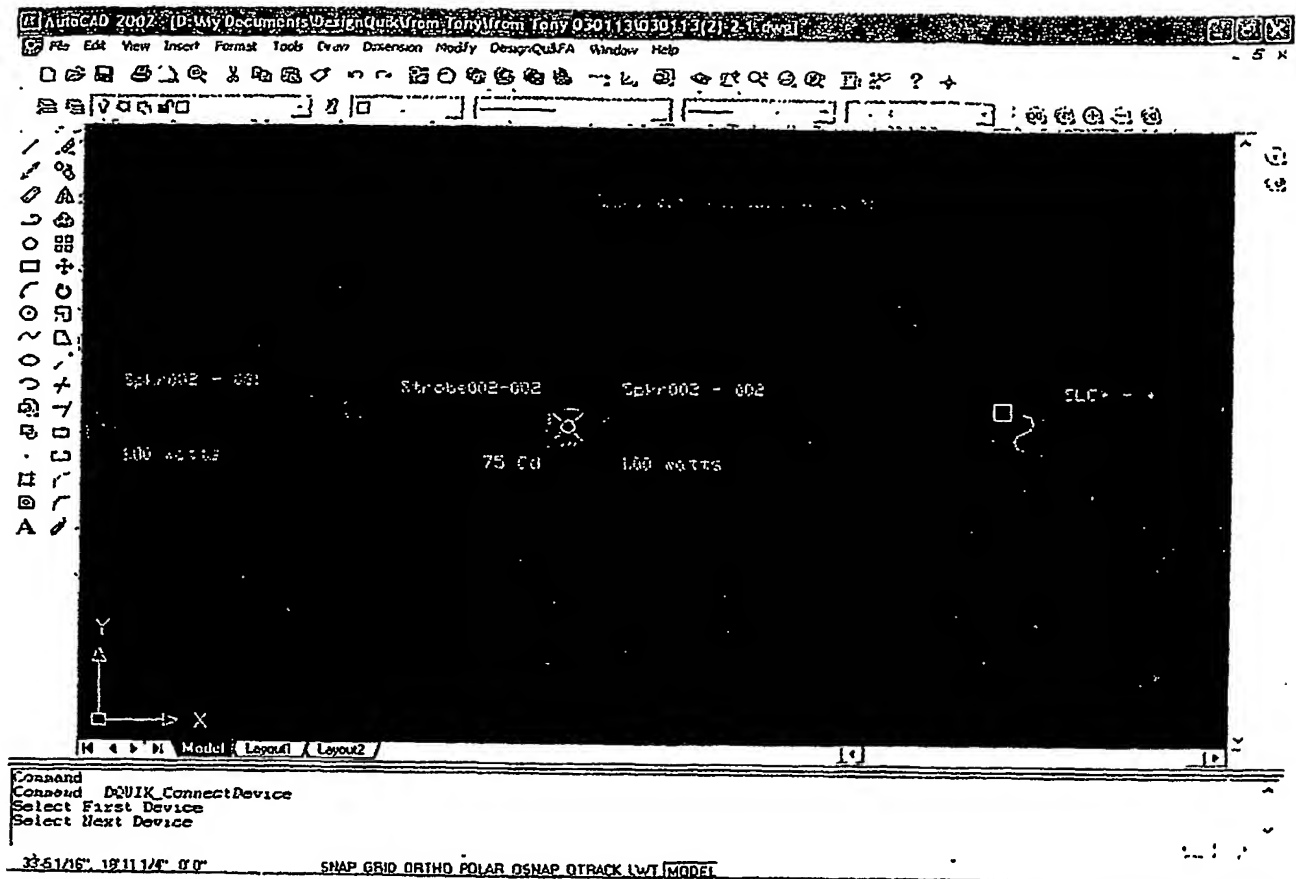


FIG. 56

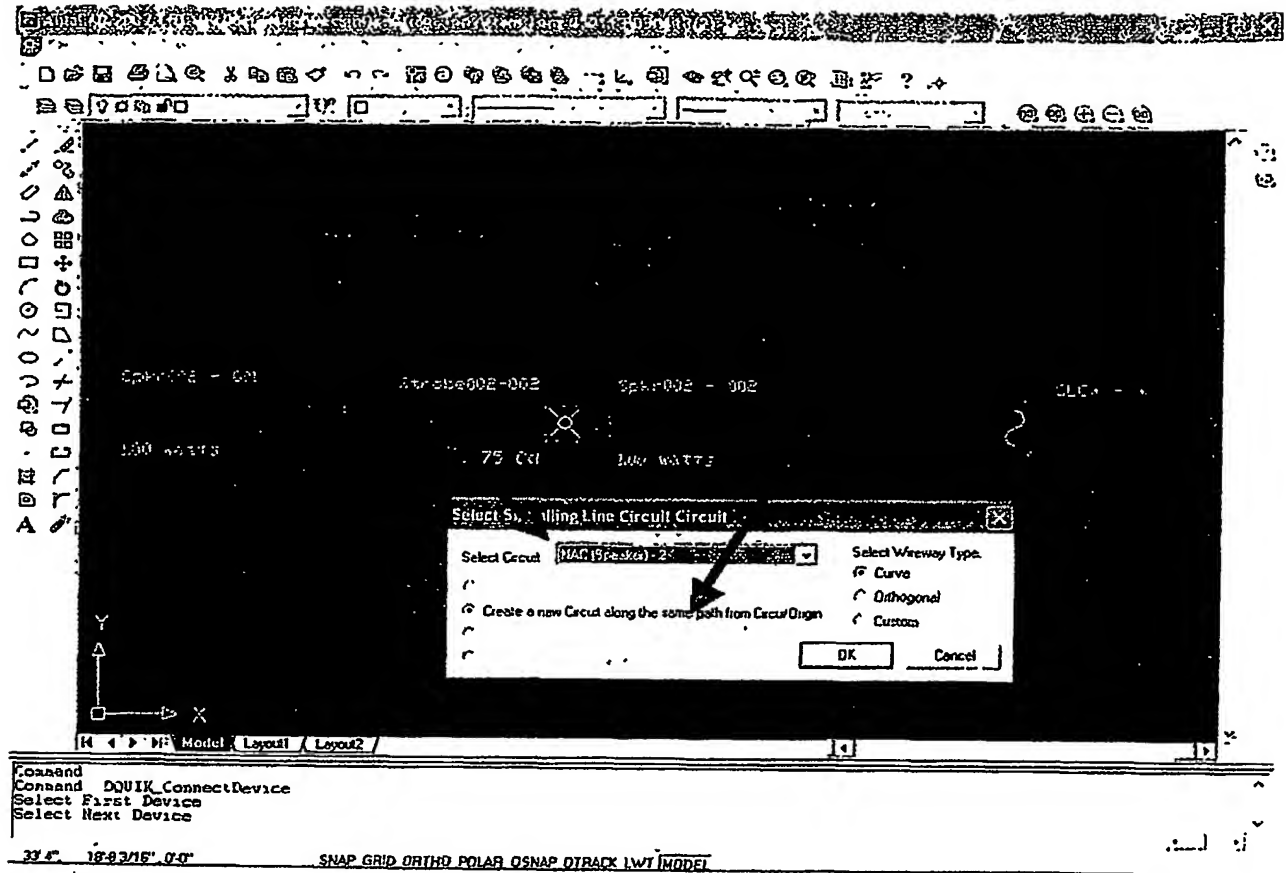


FIG. 57

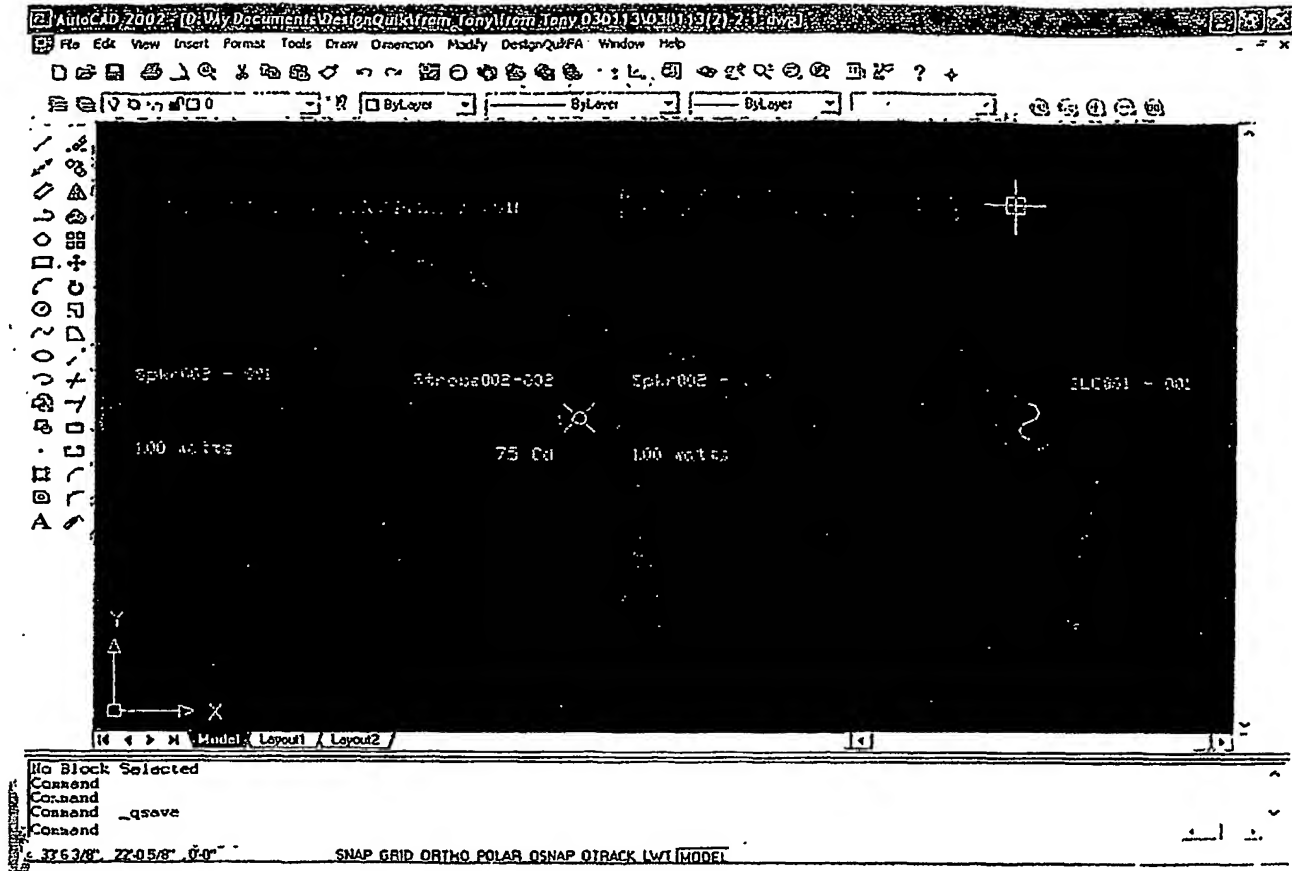


FIG. 58

SUBSTITUTE SHEET (RULE 26)